DOCUMENT RESUME

ED 081 537 RC 007 245

TITLE Indian Education: Steps to Progress in the 70's.

INSTITUTION Bureau of Indian Affairs (Dept. of Interior),

Washington, D.C.

PUB DATE 73

NOTE 57p.

AVAILABLE FROM Superintendent of Documents, U.S. Government Printing

Office, Washington, D.C. 20402 (Stock No. 2402-00032;

\$1.05)

EDRS PRICE MF-\$0.65 HC-\$3.29

DESCRIPTORS *American Indians: Bilingual Education: Boarding

Schools; Boards of Education; *Educational

Objectives; *Federal Programs; Parent Participation;

*Reservations (Indian); Self Concept; Teacher

Education

IDENTIFIERS BIA; *Bureau of Indian Affairs

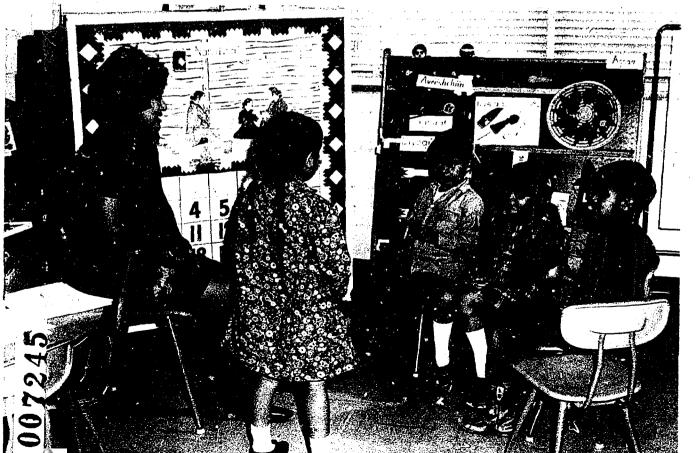
ABSTRACT

The booklet acquaints individuals with the Federal education programs serving American Indian students. Included are brief reports on some of the innovative approaches to education—i.e., individualization and open classrooms—in Bureau of Indian Affairs (BIA) schools. It delineates the broad parameters of the BIA's efforts in school operation, assistance to Indian college students, adult education, and cooperation with public schools enrolling Idian students. It gives information on the important movement of the past few years toward increased Indian participation in their education programs. It is felt that this booklet indicates the determination, on the part of the Indian people, the BIA, President Nixon, Congress, and people of the United States to keep these promises so that the 70's will be a period of educational growth and progress for American Indians. (FF)









FILMED FROM BEST AVAILABLE COPY

INDIA EDUC

Steps to in the 70

U.S. DEPARTMEN
EDUCATION &
NATIONAL INS
EDUCA
THIS DOCUMENT HI
DUCED EXACTLY AS
THE PERSON OR ORGA
ATING IT POINTS OF
STATED DO NOT NEC
SENT OFFICIAL NATIO
EDUCATION POSITION

United States Depart Bureau of Indian Aff







FILMED FROM BEST AVAILABLE COPY



INDIAN EDUCATION:

Steps to Progress in the 70's

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS OOCUMENT HAS BEEN REPRO
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN
ATING :T POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRE
SENT OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

United States Department of the Interior Bureau of Indian Affairs





As the nation's principal conservation agency, the Department of the Interior has basic responsibilities for water, fish, wildlif mineral, land, park and recreation resource. Indian and Territorial affairs are other major concerns of the Department.





Introduction

with the Federal education programs serving Indian students. It includes brief reports on some of the innovative approaches to education being used in Bureau of Indian Affairs schools. It delineates the broad parameters of the Bureau's efforts in the operation of schools, assistance to Indian college students, adult education and cooperation with public schools enrolling Indian students. It gives information about the most important movement of the past few years toward increased Indian participation in the direction of Indian education programs.

The pictures in the booklet tell their own story. They show the great variety of circumstances in which Federal education programs are carried out — modern new facilities and some smaller, older ones,

classroom and dorm members and, best and Native Alaskan

We think the bookle Indian education pr has sometimes been perhaps too slow an sometimes been reve rapid. In spite of the progress and change far to go and many We think this book! determination, on tl people, the Bureau President Nixon, an people of the United promises so that thi seventies will be a p growth and progress First Americans.





duction

with the Federal education programs serving Indian students. It includes brief reports on some of the innovative approaches to education being used in Bureau of Indian Affairs schools. It delineates the broad parameters of the Bureau's efforts in the operation of schools, assistance to Indian college students, adult education and cooperation with public schools enrolling Indian students. It gives information about the most important movement of the past few years toward increased Indian participation in the direction of Indian education programs.

The pictures in the booklet tell their own story. They show the great variety of circumstances in which Federal education programs are carried out — modern new facilities and some smaller, older ones,

classroom and dormitory scenes, staff members and, best of all, beautiful Indian and Native Alaskan children.

We think the booklet reflects progress in Indian education programs - progress that has sometimes been evolutionary and perhaps too slow and progress that has sometimes been revolutionary and very rapid. In spite of these indications of progress and change, Indian education has far to go and many promises yet to keep. We think this booklet indicates the determination, on the part of the Indian people, the Bureau of Indian Affairs, President Nixon, and the Congress and people of the United States to keep these promises so that this decade of the seventies will be a period of extraordinary growth and progress in education for our First Americans.



Goals

Programs in the Bureau of Indian Affairs is to help Indian people to make this decade of the 1970's the greatest period of progress and achievement in the history of Indian education.

This goal is not a pipedream. It is realistic.

Never before has there been the willingness, on the part of the American people, the Congress and our President, to support good, solid education programs for Indians as there is today. In addition, there has never been a time of greater interest and concern among Indians for the improvement of Indian education programs.

The role of the Bureau is to provide the administrative services and technical assistance needed and wanted by the Indian peoples to help them reach their goals.

Consequently, the educational programs offered by the Bureau of Indian Affairs, have two major concerns.

First, Indian education should relate to the Indian. This means that education considers and respects the Indian-ness of the students, that it helps them to appreciate their own rich heritage and culture. It also means that Indian parents and tribal leaders participate in the direction of the schools — through Indian advisory school boards, which exist at all Bureau schools, and through contracting the operation of programs and schools to tribal groups choosing this option.

Secondly, there should be provided the best quality education possible to prepare students for further academic work at the university level or to move into specialized technical training such as that offered by the Southwestern Indian Polytechnic Institute.

It is recognized that the backing and cooperation of Indian parents and Indian communities, as well as a desire on the part of the students, is essential for the education program to produce results.

The fulfillment of President Nixon's policy of Indian self-determination requires that Indian communities have their own lawyers, educators, architects, draftsmen and other skilled persons. The Bureau is working to help Indian peoples develop these needed professional and technical skills.





Consequently, the educational programs offered by the Bureau of Indian Affairs, have two major concerns.

First, Indian education should relate to the Indian. This means that education considers and respects the Indian-ness of the students, that it helps them to appreciate their own rich heritage and culture. It also means that Indian parents and tribal leaders participate in the direction of the schools — through Indian advisory school boards, which exist at all Bureau schools, and through contracting the operation of programs and schools to tribal groups choosing this option.

Secondly, there should be provided the best quality education possible to prepare students for further academic work at the university level or to move into specialized technical training such as that offered by the Southwestern Indian Polytechnic Institute.

It is recognized that the backing and cooperation of Indian parents and Indian communities, as well as a desire on the part of the students, is essential for the education program to produce results.

The fulfillment of President Nixon's policy of Indian self-determination requires that Indian communities have their own lawyers, educators, architects, draftsmen and other skilled persons. The Bureau is working to help Indian peoples develop these needed professional and technical skiils.

of Education

eau of Indian

ople to make he greatest

m. It is realistic.

ievement in the

n the willingness, an people, the to support trams for Indians on, there has er interest and the improve-

o provide the technical ted by the Indian their goals.





, he Borrego Pass School is one of thirteen schools managea and operated by tribal groups under contracts with the Bureau of Indian Affairs.

Indian Particip

schools attend traditionally white-oriented. In has begun to char now participate in education program children.

In accordance wipolicy of Indian signoups can operafunding provided contract arranger school year, there operated by the I serve and it is expother BIA school tribal group continents are a parer the community's school and a trib supporting this o



is one of thirteen schools managed and operated by tribal groups under contracts Affairs.

Indian Participation

Schools attended by Indian children have traditionally been white-directed and white-oriented. In the past few years, this has begun to change. Indian parents can now participate in the direction of the education programs provided for their children.

In accordance with President Nixon's policy of Indian self-determination, tribal groups can operate their own schools with funding provided by the BIA under a contract arrangement. In the 1972-73 school year, there were thirteen such schools operated by the Indian communities they serve and it is expected that in the future other BIA schools will be turned over to tribal group control. Two of the requirements are a parent referendum indicating the community's desire to operate its own school and a tribal council resolution supporting this option.



In several other ways, also, Indians are exercising an influential voice in the direction of education programs for their children.

Since 1969, Indian advisory school boards have been established at all the federallyoperated schools. These boards have only an advisory status, but they can be very influential in this capacity. Because the Secretary of the Interior is ultimately responsible for the operation of these schools, however, he or his representative must have the decision authority on policy and operations, including the appointment of personnel. Special training programs are provided for school board members and this, coupled with increased experience in school board operations, has greatly increased the effectiveness of these boards. The experience also lays the groundwork for the further step of organizaing a public school district or contracting for the operation of the school.

The administration or operation of various components of education programs has also been contracted out to tribal groups by the Bureau. Included are about one-third of the summer programs operated in conjunction with BIA education programs and about one-quarter of the ESEA Title programs. Indian groups also handle the administration of the (Johnson-O'Malley) public school assistance funds in the States of North Dakota, South Dakota, New Mexico and Nebraska; and four groups — the Navajo

Tribal Council, the All-Pueblo Council, the Omaha Tribe, and the Tlinglit-Haida Council in Alaska — administer the Bureau's higher education assistance program for their tribal groups. The total money involved in these contracted programs amounts to more than \$15 million.

A significant new development of the 1970's has been the beginning of the first Indian-operated community colleges on the Navajo, Pine Ridge, and Rosebud Reservations. These programs receive substantial support from the BIA.

Indians are also attaining more influence in the public school systems. All schools receiving Johnson-O'Malley funds from the BIA are now required to have Indian education committees involved in the planning, development, and monitoring of the programs for Indian children in public schools. This participation has also led to a greater general involvement in the school operations. At least 80 public school boards are now predominantly Indian.

Finally, Indian influence in Indian education is being furthered by the development of professional educators capable of assuming leadership roles in the schools. One phase of the Bureau's higher education assistance program is now assisting eighty-five students toward post-graduate degrees in education administration. Another undergraduate program has sixty-nine students enrolled in special courses to prepare them for work in Indian education programs.

Career opportun schools are also chance to obtain continuing to ea programs permit teachers in four velopment of the valuable contributeachers in the F





also, Indians are al voice in the programs for their

visory school boards at all the federallyse boards have only I they can be very icity. Because the ior is ultimately eration of these or his representative h authority on policy ling the appointment raining programs I board members and eased experience in ns, has greatly ness of these boards. vs the groundwork organizaing a public racting for the Ы.

operation of various ion programs has also tribal groups by the bout one-third of the rated in conjunction ograms and about EA Title programs. dle the administra-'Malley) public school States of North, New Mexico and pups — the Navajo

Tribal Council, the All-Pueblo Council, the Omaha Tribe, and the Tlinglit-Haida Council in Alaska — administer the Bureau's higher education assistance program for their tribal groups. The total money involved in these contracted programs amounts to more than \$15 million.

A significant new development of the 1970's has been the beginning of the first Indian-operated community colleges on the Navajo, Pine Ridge, and Rosebud Reservations. These programs receive substantial support from the BIA.

Indians are also attaining more influence in the public school systems. All schools receiving Johnson-O'Malley funds from the BIA are now required to have Indian education committees involved in the planning, development, and monitoring of the programs for Indian children in public schools. This participation has also led to a greater general involvement in the school operations. At least 80 public school boards are now predominantly Indian.

Finally, Indian influence in Indian education is being furthered by the development of professional educators capable of assuming leadership roles in the schools. One phase of the Bureau's higher education assistance program is now assisting eighty-five students toward post-graduate degrees in education administration. Another undergraduate program has sixty-nine students enrolled in special courses to prepare them for work in Indian education programs.

Career opportunity programs in the Bureau schools are also providing Indian aides the chance to obtain college degrees while continuing to earn a salary. Most of these programs permit aides to become certified teachers in four years — a substantial development of their own potential and a valuable contribution of more Indian teachers in the Federal schools.





Diomede School, Alaska



Oglala Community School, Pine Ridge, South Dakota

ERIC Full Text Provided by ERIC

Federal Schools

The Federal school system operated by the Bureau of Indian Affairs ranges, geographically, from the Arctic Circle to Southern Florida. Its 199 schools serve some 51,000 children who are either Native Alaskans or members of Federally-recognized Indian tribes living on or near reservations or trust land.

The BIA schools supplement but do not supplant the public school systems. About one quarter of the more than 200,000 Indian students attend Federal schools; two-thirds, about 134,000, go to local public schools and approximately 18,000 are enrolled in mission and other private schools. Attendance at public schools is encouraged by the Bureau when this seems possible and desirable.

Special needs, however, require the continuation of the BIA schools. Seventy-eight Federal boarding schools, elementary and secondary, are used to educate (a) children who live in isolated areas with no day school close to their homes, (b) children whose educational needs cannot be met by the schools available to them, and (c) children who for social or economic reasons require care away from their homes even though other schools are available to them. More than 36,000 children attend these boarding schools which have an average enrollment of close to 500.

The 121 day schools are generally much smaller; the majority of them have enrollments of less than 100 and average two or three classroom units. Fifty-three of these schools are in small Alaskan villages.

The BIA budget for education programs in fiscal year 1973 is more than \$200 million. This includes funds for the operation and construction of Federal schools, for assistance to public schools serving Indian students, for higher education assistance and for adult education rograms.

The curriculum in the BIA schools and the education approaches used meet all the program standards required by the states in which the schools are located — and go beyond these to respond to the special needs of the Indian students.

Many Indian children speak little or no English when they first begin school. English, then, must be learned as a second language while it is also being used as a language of instruction for other subjects. Bilingual education programs have been initiated in some of the Federal schools to help ease this burden.

The Indian students also have two cultures to learn about. They need to know and appreciate their own heritage while also learning about the non-Indian world around them. Teachers at Indian schools need to be culturally sensitive persons, aware of the way a particular culture influences values, attitudes and approaches to life. They must also be innovative in introducing Indian culture factors into the social studies and other subjects.

In addition to these special factors, many Indian children suffer the educational disadvantages common to those who live in rural isolation and poverty. The out-ofschool experiences of children are of primary importance in the learning process. Various compensatory programs are provided in the BIA schools to attempt to meet the children's needs. These include remedial reading laboratories, special education classes, special field trips and other programs. Some of these programs are funded under the Elementary and Secondary Education Act (commonly called ESEA Title Programs) administered by the United States Office of Education.

At the Bureau's bo of the children, es ones, is a constant living away from h not the ideal, but i currently is not feat adequate high scho Alaskan village, fo have only 10-15 hi The Bureau's dorn them Indian, recog is not a home, but maintain a home-li warm and pleasant boarding schools, nutrition study, ar children in the Un to the school or st encouraged when

In the operation of grams, the BIA coo educational and go tions. These includ Office of Education Opportunity (Head Agriculture (Schoo Indian Health Serviof Education, varional education



, require the conthools. Seventy-eight pls, elementary and educate (a) chiled areas with no day omes, (b) children ds cannot be met by them, and (c) chileconomic reasons their homes even re available to them. dren attend these have an average 500.

re generally much f them have enrolland average two or fifty-three of these askan villages.

ucation programs in e than \$200 million. the operation and I schools, for assist-serving Indian ucation assistance n programs.

BIA schools and the used meet all the uired by the states in ocated — and go and to the special dents.

Many Indian children speak little or no English when they first begin school. English, then, must be learned as a second language while it is also being used as a language of instruction for other subjects. Bilingual education programs have been initiated in some of the Federal schools to help ease this burden.

The Indian students also have two cultures to learn about. They need to know and appreciate their own heritage while also learning about the non-Indian world around them. Teachers at Indian schools need to be culturally sensitive persons, aware of the way a particular culture influences values, attitudes and approaches to life. They must also be innovative in introducing Indian culture factors into the social studies and other subjects.

In addition to these special factors, many Indian children suffer the educational disadvantages common to those who live in rural isolation and poverty. The out-ofschool experiences of children are of primary importance in the learning process. Various compensatory programs are provided in the BIA schools to attempt to meet the children's needs. These include remedial reading laboratories, special education classes, special field trips and other programs. Some of these programs are funded under the Elementary and Secondary Education Act (commonly called ESEA Title Programs) administered by the United States Office of Education.

At the Bureau's boarding schools, the care of the children, especially the younger ones, is a constant concern. Having children living away from home to attend school is not the ideal, but rather a necessity. It currently is not feasible to provide an adequate high school program in a small Alaskan village, for example, which may have only 10-15 high school age children. The Bureau's dormitory personnel, most of them Indian, recognize that an institution is not a home, but they do their best to maintain a home-living atmosphere that is warm and pleasant. The students at BIA boarding schools, according to a recent nutrition study, are among the best-fed children in the United States. Parental visits to the school or student visits home are encouraged when they are possible.

In the operation of its educational programs, the BIA cooperates fully with other educational and governmental organizations. These include the United States Office of Education, Office of Economic Opportunity (Headstart), Department of Agriculture (School Lunch Program), Indian Health Service, State Departments of Education, various universities and national educational associations.





Bilingual Education

Southwestern Alaska's Bilingual
Program — conceived as a means of
preserving the Eskimo language and identity
in the Yupik-speaking area of the State — is
now in its third year, and an initial evaluation indicates students in the experimental
program have made substantial vocabulary
gains in both Eskimo and English.

Financed by the Alaska State-Operated School System and Federal Bureau of Indian Affairs, the program is conducted in cooperation with the University of Alaska's Center for Northern Educational Research, assisted by the Department of Linguistics and Foreign Languages and its Eskimo Language Workshop.



Begun as a pilot study in 1970, the program turned upside down the traditional teaching method in rural schools which requires students to learn solely in English. Under the new experimental concept, students in the program are being taught mainly in the Yupik dialect with short periods each day devoted to study of English, a foreign language to most of them.

The estimated 18,000 Eskimos who speak Yupik live mainly in Southwestern Alaska, in the lower Kuskokwim and Yukon river region between Bristol Bay and Norton Sound. This is nearly twice the number living in Arctic Alaska and speaking the Inupiat dialect.

Since Yupik is the predominant language in Southwestern Alaska, this area was deemed the best place to implement this particular bilingual program.

"We're doing it there because it can be done there — it's not too late," says Miss Irene Reed, director of the Eskimo Language Workshop. "Eskimo is the basic language and the people there are very proud of it. If this program succeeds, Eskimo will remain as a language of literature and culture throughout the lives of the students."

First graders in BIA schools at Nunapitchuk, Akiachuk, and at Napakiak, and a kindergarten class in a State-operated school at Bethel were involved in the original bilingual program, begun in September 1970.

Since it was an experimental program, it was necessary to develop some means of measuring the students' progress, compare it with progress made by students in similar grades in village schools being taught primarily in English. This task fell to Dr. James Orvik of the university's Center for Northern Educational Research.

Through a series of tests in English and Eskimo, administered in September 1970, Dr. Orvik gained the base line data with which subsequent data would be compared to measure linguistic competence.

A second round of tests was given in May 1971. The testing technique employed involved the use of pictures in conjunction with a prearranged set of Yupik and English stimulus words to elicit responses from the students.

From this initial testing, Dr. Orvik concluded the students made substantial vocabulary gains in Eskimo and English in the first year of the bilingual program.

"The fact that the rate of acquisition of English vocabulary is accelerated by the bilingual program speaks to a very immediate issue relevant to the acceptance of the entire program concept," he wrote in an evaluation of the program.



Olympian Billy Mills, the 10,000 meter run, Education i²rograms st recreation, physical ed programs. An Oglala S Institute graduate.



n 1970, the proin the traditional
if schools which
in solely in English,
ental concept,
are being taught
lect with short
if to study of
age to most of

skimos who speak uthwestern Alaska, n and Yukon river Bay and Norton rice the number nd speaking the

ominant language in his area was deemed hent this particular

cause it can be done ," says Miss Irene skimo Language he basic language e very proud of it. If Eskimo will remain re and culture the students."

ools at k, and at Napakiak, and a kindergarten class in a State-operated school at Bethel were involved in the original bilingual program, begun in September 1970.

Since it was an experimental program, it was necessary to develop some means of measuring the students' progress, compare it with progress made by students in similar grades in village schools being taught primarily in English. This task fell to Dr. James Orvik of the university's Center for Northern Educational Research.

Through a series of tests in English and Eskimo, administered in September 1970, Dr. Orvik gained the base line data with which subsequent data would be compared to measure linguistic competence.

A second round of tests was given in May 1971. The testing technique employed involved the use of pictures in conjunction with a prearranged set of Yupik and English stimulus words to elicit responses from the students.

From this initial testing, Dr. Orvik concluded the students made substantial vocabulary gains in Eskimo and English in the first year of the bilingual program.

"The fact that the rate of acquisition of English vocabulary is accelerated by the bilingual program speaks to a very immediate issue relevant to the acceptance of the entire program concept," he wrote in an evaluation of the program.



Olympian Billy Mills, 1964 gold medal winner in the 10,000 meter run, is a member of the BIA Education Programs staff, with responsibility for recreation, physical education and athletic programs. An Oglala Sioux, Mills is a Haskell Institute graduate.





"The reservation most often expressed by potential recipients of a bilingual program is that the children are going to get behind or 'lose ground' in their ability to use English and thus will be retarded in their capacity for participating in the mainstream of the dominant culture. That such retardation doesn't seem to exist, on the contrary, acceleration is more likely the case, is probably the most important finding . . . at this early state of the bilingual program."

Both parents and students are enthusiastic about the program, say Dr. Orvik and Miss Reed.

Teaching only in English "tended to divorce kids from the home," says Miss Reed. "In many ways it was an alienation process. Eventually many kids would be unable to speak Eskimo, and they could not share their learning with their Eskimo speaking parents."

"Parents are becoming more and more interested in the schools since the bilingual program was started," says Dr. Orvik. "The children are coming home singing songs in Eskimo and the parents are pleased. They want their children to know both languages."

The objective of the bilingual program is to help students become literate in Eskimo and English. Each year, more and more



English will be taught with the emphasis gradually shifting from Eskimo. By about the fourth year, students would be learning mainly in English.

The bilingual program this year is continuing in the original four schools and has been extended to nine others — State schools at Togiak, Twin Hills, Manokotak, Kongiganak and North Aleknagik and BIA schools at Kasigluk, Tuntutuliak, Kipnuk and Quinhagak.

Once a uniform system of writing in Yupik and supplemental teaching materials had been developed, the University of Alaska began training bilingual Eskimos from Southwestern Alaska as teachers.

These Eskimos are now teaching Yupik in their own villages. They use the standard writing system which they learned in training sessions at the Eskimo Language Workshop. At these sessions they were also taught methods of teaching by personnel of the Center for Northern Educational Research, the BIA and the Alaska State Operated School System.

The English language portion of the bilingual program is taught by the regular English-speaking classroom teachers assigned to the participating BIA and state-operated schools. These teachers also undergo special training — to learn the philosophy behind the bilingual program and methods of teaching English as a second language.



Bilingual education programs have also been initiated in the states of Arizona, Ne



th the emphasis skimo. By about would be learning

his year is continuchools and has thers — State Hills, Manokotak, tleknagik and BIA tutuliak, Kipnuk

of writing in Yupik ng materials had versity of Alaska Eskimos from leachers.

teaching Yupik in use the standard by learned in trainto Language Workhey were also ing by personnel of Educational he Alaska State

rtion of the biliny the regular
om teachers
ting BIA and stateteachers also
— to learn the
bilingual program
y English as a



Bilingual education programs have also been initiated in the states of Arizona, New Mexico and South Dakota.





Airbookmobile

In a classroom in Mountain Village, Alaska, Francis Joe, Jr. browses through a large orange book, writes a title on a card, and gives the card to his teacher. Others in his classroom have done the same thing, and the teacher, Mr. Lynch, collects these cards and sends them off on the mail plane. On the next mail plane Francis Joe, Jr. will receive the sound filmstrip LITTLE TIM AND THE BRAVE SEA CAPTAIN. Using the school equipment he can view this in private or share it with his classmates. Others it his class will receive books or media which they have chosen and ordered on the same mail plane.

Something new has been added to the educational program in the rural schools of the Bethel Agency, Bureau of Indian Affairs, Juneau Area, Alaska. That something is the Bethel Regional Library.

For those not familiar with Alaska, the village of Bethel, population 2,416, is centrally located in an area of about 100,000 square miles, roughly the size of the state of Montana, with a population of



13,802 of which 12,427 are native Alaskans. There are no roads in this area so all transportation is by the rivers, dog team, snowmobile or air. Some villages can only be reached by float or ski planes and are virtually inaccessible during freeze-up in the fall and break-up in the spring.

The Bethel Regional Library, originally called the Airbookmobile, offers complete library services tailored to meet the specific needs of the schools in thirty-four remote Alaskan villages. The children in these schools need a quantity of high quality materials if they are going to compete successfully in today's world. Picture books are especially important since they provide a universe of vicarious experiences thus supplementing the child's first-hand local experiences. Even older children will readily browse picture books and can learn many concepts as well as be exposed to excellent use of language through them. Probably the needs of the children are as great if not greater than those of any other group of children in regard to the need for quality instructional materials.

For its initial collection, Bethel Regional Library has acquired all the titles listed in the fifth edition of the ELEMENTARY SCHOOL LIBRARY COLLECTION, a catalog published by Bro-Dart, Inc. This list, the large orange book Francis Joe, Jr. was browsing, is one of the best buying guides for school libraries available today. It has been carefully selected by a com-

mittee of practicing professional school librarians and is designed to meet the needs of the school curriculum as well as to provide a wide range of materials on all subjects. The list contains over 8,000 books and 2,000 media titles.

Each of the schools in the Agency has a catalog and complete index of the materials available in the library. Teachers, of course, use this reference to request specific titles but they can also request the library to select support materials for a unit they are teaching. A teacher in Kwigillingok, for example, received a multi-media package to support his unit on the weather by merely telling the library the unit subject, grade levels and the number of students involved.

Teachers also teach the children how to use the catalog to order materials for themselves — for school projects or simply for entertainment.

Library staff members, when they visit the schools, not only visit each classroom for storytelling and teaching about the library, they also have an evening meeting for parents and interested adults. The librarians talk with the parents about how important it is that they look at and share books with their children, including the pre-school-age ones, to encourage their learning to read.

Each child is provided with a plastic tote bag for carrying books home where they can be shared with other members of the family.



Francis Joe, Jr. of M. from the Bethel Regi

The library staff hand all the Francis Agency will come library and books that they will get know that wherev turn to a library fition. When this is in the isolated vill will be on their wing through librar



are native
roads in this area so
the rivers, dog team,
e villages can only
ki planes and are
ring freeze-up in
the spring.

brary, originally ile, offers complete to meet the specific thirty-rour remote ildren in these of high quality ng to compete vorld. Picture books since they provide xperiences thus i's first-hand local children will books and can learn is be exposed to e through them. he children are as those of any other ard to the need for terials.

, Bethel Regional the titles listed in ELEMENTARY DLLECTION, a o-Dart, Inc. This ok Francis Joe, Jr. the best buying es available today. ected by a com-

mittee of practicing professional school librarians and is designed to meet the needs of the school curriculum as well as to provide a wide range of materials on all subjects. The list contains over 8,000 books and 2,000 media titles.

Each of the schools in the Agency has a catalog and complete index of the materials available in the library. Teachers, of course, use this reference to request specific titles but they can also request the library to select support materials for a unit they are teaching. A teacher in Kwigillingok, for example, received a multi-media package to support his unit on the weather by merely telling the library the unit subject, grade levels and the number of students involved.

Teachers also teach the children how to use the catalog to order materials for themselves — for school projects or simply for entertainment.

Library staff members, when they visit the schools, not only visit each classroom for storytelling and teaching about the library, they also have an evening meeting for parents and interested adults. The librarians talk with the parents about how important it is that they look at and share books with their children, including the pre-school-age ones, to encourage their learning to read.

Each child is provided with a plastic tote bag for carrying books home where they can be shared with other members of the family.



Francis Joe, Jr. of Mt. Village enjoys his filmstrip from the Bethel Regional Library.

The library staff hopes that Francis Joe, Jr. and all the Francis Joes in the Bethel Agency will come to understand what a library and books can mean in their lives, that they will get the library habit and will know that wherever they may be they can turn to a library for information and recreation. When this is accomplished, the children in the isolated villages in southwestern Alaska will be on their way to a lifetime of learning through library use.



Louis W. Bullard, music education specialist for the Bureau of Indian Affairs and America's foremost composer of Indian music, was selected as the recipient of the 1972 Indian Achievement Award. Through workshops and technical assistance to teachers, Ballard is helping to preserve the Indian's musical heritage while enriching music education programs for Indian students. Ballard is of Cherokee-Quapaw descent. His work, Desert Trilogy, was nominated for the 1972 Pulitzer Prize in Music.

The Magic of Music

music program is helping Choctaw Indian students become better readers. California Achievement Test grades for the students have shown a clear correlation between the amount of music instruction received and improvement in reading and language skills. And this is only one of the benefits coming from the program.

The 3,600 Choctaw Indians, residing in a seven county area near Philadelphia, Mississippi, speak Choctaw as their preferred language and English as a second language. Choctaw is lacking in many sounds, many letters of the alphabet and many concepts or terms commonly used in English. Also, the Choctaw language has many sounds not

contained in Engli to carry over into

Achieving facility ly, quite difficult.

In the program the Choctaw chants, a are then taped, refor posterity. In a repertoire of song choral and dance a simple melody insoptional basis, to receive private voi

The music program the language arts a music, singing, cha orchestrated with and social events u during the school

Staff members have program has helpe shyness and retice and has helped the persons of worth,

Mrs. Minnie Hand Teacher, said this: of music work for seen them free of sing and play smal have seen them los but I hadn't seen t really reached the learned the Choct them."



education specialist for the and America's foremost c, was selected as the lian Achievement Award. technical assistance to ng to preserve the Indian's priching music education lents. Ballard is of the 1972 Pulitzer

The Magic of Music

music program is helping Choctaw Indian students become better readers. California Achievement Test grades for the students have shown a clear correlation between the amount of music instruction received and improvement in reading and language skills. And this is only one of the benefits coming from the program.

The 3,600 Choctaw Indians, residing in a seven county area near Philadelphia, Mississippi, speak Choctaw as their preferred language and English as a second language. Choctaw is lacking in many sounds, many letters of the alphabet and many concepts or terms commonly used in English. Also, the Choctaw language has many sounds not

contained in English and these sounds tend to carry over into English expression.

Achieving facility in English is, consequently, quite difficult.

In the program the students learn their own Choctaw chants, dances and rhythms which are then taped, recorded or otherwise saved for posterity. In addition they learn a large repertoire of songs in English, participate in choral and dance groups, learn to play simple melody instruments and, on an optional basis, to learn band instruments or receive private voice or piano lessons.

The music program is so integrated with the language arts and social studies that the music, singing, chants and dancing are orchestrated with the literary, historical and social events undergoing exploration during the school year.

Staff members have noted that the music program has helped students to overcome shyness and reticence in social interactions and has helped them to see themselves as persons of worth, skill and ability.

Mrs. Minnie Hand, the Agency Music Teacher, said this: "I have seen the magic of music work for Choctaw children. I have seen them free of inhibition as they dance, sing and play small melody instruments. I have seen them lost in the mood of music, but I hadn't seen them lost in music that really reached them down deep until I learned the Choctaw music and taught it to them"



Colleges/Universities

ne of the most dramatic and significant, developments in Indian education is the tremendous increase in the past few years of Indian students attending colleges and universities.

In the 1972-73 school year, it is expected that a record number of nearly 14,000 Indian students will receive higher education assistance — scholarship grants — from the Bureau of Indian Affairs. Ten years ago the number of Indian students seeking assistance to enable them to go into college studies was less than 1,000. And in just the past four years, the Bureau's budget for higher education assistance has been multiplied almost seven times — from approximately \$3 million to almost \$21 million.

To be eligible for BIA scholarship grant assistance, a person must possess one-fourth or more degree American Indian, Eskimo or Aleut blood and be a member of a tribal group served by the Bureau of Indian Affairs. Financial need and scholastic ability are factors of consideration, as well as having the applicant enrolled or accepted for enrollment at an accredited college or university.

The grants provided to the students are supplemental to other resources available. There are many other sources of higher education assistance for Indian students from the Federal and State governments, foundations, tribal programs, and the universities themselves. The Bureau publishes a booklet listing more than 100 such sources.

BIA high school cou arship representative counseling services t higher education, in to make application and obtaining adequ

Just a few years bac single Indian lawyer Mexico and Arizona large Indian populat more than 100 Indiamore than 40 law sc Bureau's higher edu program. In almost a comparable developm Indian communities



Universities

amatic and significant Indian education is e in the past few s attending colleges

year, it is expected of nearly 14,000 ceive higher educaarship grants — from affairs. Ten years ago tudents seeking one of motion must the reau's budget for ance has been mulnes — from approximost \$21 million.

To be eligible for BIA scholarship grant assistance, a person must possess one-fourth or more degree American Indian, Eskimo or Aleut blood and be a member of a tribal group served by the Bureau of Indian Affairs. Financial need and scholastic ability are factors of consideration, as well as having the applicant enrolled or accepted for enrollment at an accredited college or university.

The grants provided to the students are supplemental to other resources available. There are many other sources of higher education assistance for Indian students from the Federal and State governments, foundations, tribal programs, and the universities themselves. The Bureau publishes a booklet listing more than 100 such sources.

BIA high school counselors and area scholarship representatives provide guidance and counseling services to prepare students for higher education, including assisting them to make application for college admittance and obtaining adequate financial support.

Just a few years back, there was not a single Indian lawyer in the states of New Mexico and Arizona — two states with very large Indian populations. Today there are rncre than 100 Indian students enrolled in more than 40 law schools through the Bureau's higher education assistance program. In almost every professional field a comparable development is taking place — a development of future leaders for Indian communities.



15/1

Institute of American Indian Arts

The Institute of American Indian Arts in Santa Fe, New Mexico, established in 1962 to foster and promote Indian interest in the arts, has gained nationwide recognition. Serving Native American youth from all areas of the United States, the Institute offers training in virtually every field of the arts — painting, graphics, sculpture, ceramics, textiles, exhibition arts, photography, as well as drama, music, the dance creative writing, and a limited offering of commercial art.

Superintendent Lloyd H. New noted that, in establishing IAIA, the Bureau of Indian Affairs made special curriculum provisions "in an attempt to turn the potential disadvantage of the cultural transition to advantage and to stimulate extensions of American Indian expressions in the arts. The underlying philosophy of the program is that unique cultural tradition can be honored and can be used creatively as the springboard to a meaningful contemporary life."

The school offers an accredited high school program with emphasis on the arts, and a post-secondary vocational arts program as preparation for college and technical

schools and emplo vocations. The age body is from 15 to school year, the sc sisted of 170 high 11 and 12) and 11 dents studying in f museum training, f arts, and humaniti

The Institute of Alpraised by such pa Vincent Price, who creative writing to student authors had recognition for the example is Emerso Navajo from New biographical Mirac, the University of Cand received wide

Prominent alumni Eder, Sioux, paint painter; Pete Jones Roger Tsabetsaye, Susunkewa, Hopi, Conway, Blackfeet

These are just a fer dents who have go



The Institute of American Indian Arts in Santa Fe, New Mexico, established in 1962 to foster and promote Indian interest in the arts, has gained nationwide recognition. Serving Native American youth from all areas of the United States, the Institute offers training in virtually every field of the arts — painting, graphics, sculpture, ceramics, textiles, exhibition arts, photography, as well as drama, music, the dance, creative writing, and a limited offering of commercial art.

Superintendent Lloyd H. New noted that, in establishing IAIA, the Bureau of Indian Affairs made special curriculum provisions "in an attempt to turn the potential disadvantage of the cultural transition to advantage and to stimulate extensions of American Indian expressions in the arts. The underlying philosophy of the program is that unique cultural tradition can be honored and can be used creatively as the springboard to a meaningful contemporary life."

The school offers an accredited high school program with emphasis on the arts, and a post-secondary vocational arts program as preparation for college and technical

schools and employment in arts-related vocations. The age range of the student body is from 15 to 22. During the 1972-73 school year, the school's enrollment consisted of 170 high school students (grades 11 and 12) and 112 post-secondary students studying in five areas — graphic arts, museum training, teacher training, applied arts, and humanities and ethnic studies.

The Institute of American Indian Arts is praised by such patrons of the arts as actor Vincent Price, who gives annual awards in creative writing to IAIA students. Several student authors have received national recognition for their prose works. A fine example is Emerson Blackhorse Mitchell, a Navajo from New Mexico, whose autobiographical Miracle Hill was published by the University of Oklahoma Press in 1967 and received wide critical acclaim.

Prominent alumni of IAIA include Earl Eder, Sioux, painter; Carol Frazier, Paiute, painter; Pete Jones, Seneca, ceramics; Roger Tsabetsaye, Zuni, jeweler; Manfred Susunkewa, Hopi, textile designer; Keith Conway, Blackfeet, filmmaker.

These are just a few of the Institute's students who have gone on to successful



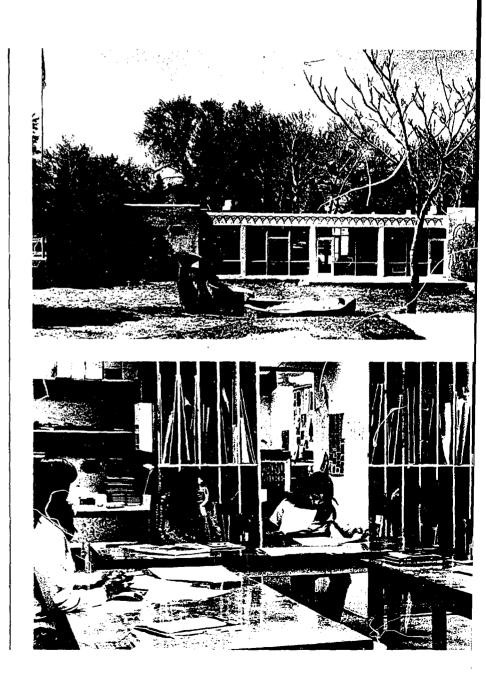
careers in the arts — not bad for an institution that is only 10 years old.

IAIA's widespread reputation has resulted in a stream of foreign visitors each year, from Africa, Russia, Central and South America, Australia and New Zealand, visitors interested in the art style of North American Indian students and in the Institute's approach to education.

The Institute has received considerable attention in the printed news media, including articles and photographs in such publications as Life, The New Yorker, The London Observer, American Education, New Mexico Magazine and House Beautiful.

Its students usually can be counted on to carry off many of the honors at such annual art exhibits as the Scottsdale Indian National in Scottsdale, Arizona, and the Philbrook Indian National in Tulsa, Oklahoma.

Student work has been exhibited in Edinburgh, Scotland; at the Berlin Festival; in Ankara, Turkey; Buenos Aires, Argentina; Santiago, Chile; and at the 1968 Olympics in Mexico City.





nd for an instituold.

ion has resulted ors each year, al and South w Zealand, it style of North and in the Instion.

considerable

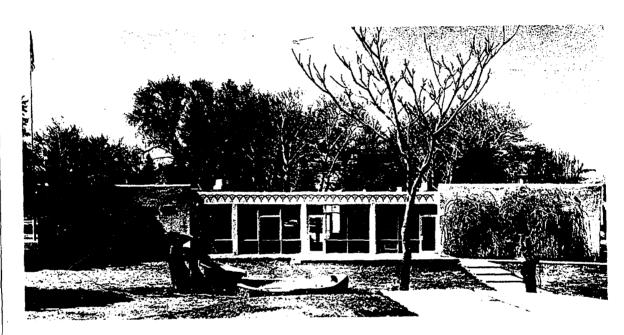
ews media, ingraphs in such

New Yorker, The
an Education,

House Beautiful.

e counted on to nors at such ancottsdale Indian rizona, and the Il in Tulsa,

whibited in Edinerlin Festival; in Aires, Argentina; ne 1968 Olympics





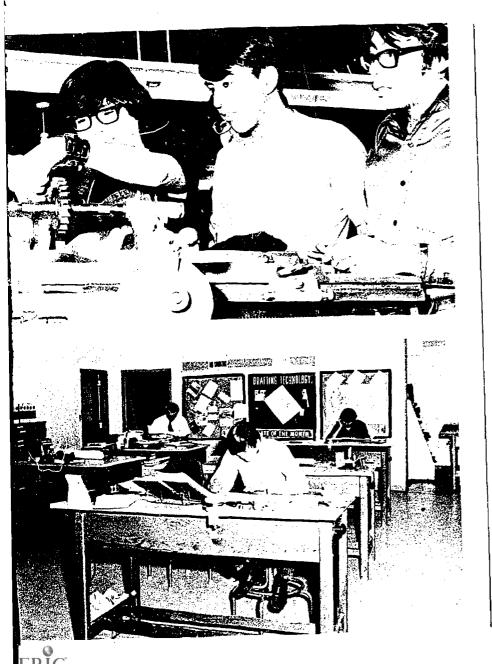


Haskell Indian Junior College

Haskell Indian Haskell Instiperhaps the best-k Bureau of Indian A operated school siproduced many of its accomplishmen by Indians and no in the U.S., Indian are those that known amed after a Kan

Sen. Robert F. Ke school shortly bef termed Haskell a s





Haskell Indian Junior College

Haskell Indian Junior College, formerly Haskell Institute, Lawrence, Kan., is perhaps the best-known institution in the Bureau of Indian Affairs. A Government-operated school since 1884, Haskell has produced many outstanding graduates, and its accomplishments have been proclaimed by Indians and non-Indians alike. Wherever in the U.S., Indian people are found, there are those that know Haskell, which was named after a Kansas congressman.

Sen. Robert F. Kennedy, speaking at the school shortly before his death in 1968, termed Haskell a school "with a fine record."

The enrollment of between 1150 and 1200 young men and women come from 30 states and more than a hundred tribes. Tribal affiliations range from Seminoles in Florida to Eskimos in Alaska; from Senecas in New York to Quechans on the Arizona-California border; and from the Alabamas and Coushattas in Texas to Chippewas in Minnesota.

Haskell's evolution during its 86 years of existence has been continual. From 1885-1890, the school's official name was the United States Indian Industrial Training School, but it was called Haskell even then. From 1890-1970, the school's official name was Haskell Institute. Since 1970, it has been Haskell Indian Junior College.

When Haskell opened in 1884, the curriculum centered around the manual labor of agriculture in grades 1-5. By 1894, Haskell was also training teachers in a Normal Department. One year later, a Commercial Department was created offering business training.

By 1899, the Agriculture curriculum had expanded into a variety of specialized areas, such as fruit culture and dairying. A Trades Department was added. In 1901, a uniform course of study was introduced by the Bureau of Indian Affairs. By 1927, the secondary curriculum had been accredited by the State of Kansas, and Haskell was offering post-high school courses in a variety of areas. By 1935, Haskell High School graduates were being actively

recruited to remain and take up a post-high vocational study.

In 1962, the secondary program began to be phased out. In 1965, the last high school class graduated, and Haskell evolved into a post-high vocational-technical school.

By 1966, the school was investigating the higher education needs of Indian young people and the possibility of junior college accreditation, and, in 1968, initial steps were taken to achieve Kansas State Junior College accreditation. Final state accreditation was formally received in 1970. With the addition that year of a two-year general education curriculum leading to an Associate of Arts degree, Haskell Institute became Haskell Indian Junior College.

To meet the needs of Indian students in an ever-changing world, Haskell is developing broader and more complete educational opportunities. The comprehensive junior college program now offered expands the Indian student's study possibilities across a wide spectrum of educational choices. The student can choose to pursue a trade or technical skill, a junior college degree, or a combination of both.

The American Indian Athletic Hall of Fame has been established at Haskell. Robert L. Bennett, a former Commissioner of Indian Affairs, is founder of the Hall of Fame, and Billy Mills, Olympic Gold Medal winner in the 1964 Olympics, worked with the Hall of Fame board to make the shrine a reality.





reen 1150 and formen come from ha hundred tribes. from Seminoles halaska; from p Quechans on the ler; and from the tas in Texas to la.

ing its 86 years of tinual. From s official name was in Industrial Training d Haskell even then thool's official tute. Since 1970, it funior Coolege.

n 1884, the curnd the manual labor
1-5. By 1894, Haseachers in a Normal
later, a Commercial
d offering business

ure curriculum had y of specialized ture and dairying. A as added. In 1901, a dy was introduced by Affairs. By 1927, the had been accredited s, and Haskell was pol courses in a 135, Haskell High being actively

recruited to remain and take up a post-high vocational study.

In 1962, the secondary program began to be phased out. In 1965, the last high school class graduated, and Haskell evolved into a post-high vocational-technical school.

By 1966, the school was investigating the higher education needs of Indian young people and the possibility of junior college accreditation, and, in 1968, initial steps were taken to achieve Kansas State Junior College accreditation. Final state accreditation was formally received in 1970. With the addition that year of a two-year general education curriculum leading to an Associate of Arts degree, Haskell Institute became Haskell Indian Junior College.

To meet the needs of Indian students in an ever-changing world, Haskell is developing broader and more complete educational opportunities. The comprehensive junior college program now offered expands the Indian student's study possibilities across a wide spectrum of educational choices. The student can choose to pursue a trade or technical skill, a junior college degree, or a combination of both.

The American Indian Athletic Hall of Fame has been established at Haskell. Robert L. Bennett, a former Commissioner of Indian Affairs, is founder of the Hall of Fame, and Billy Mills, Olympic Gold Medal winner in the 1964 Olympics, worked with the Hall of Fame board to make the shrine a reality.







Southwestern Indian Polytechnic Institute

Southwestern Indian Polytechnic Institute at Albuquerque is a unique school in the Bureau of Indian Affairs. Built in 1971 on a 164-acre campus in the lovely north valley of Albuquerque, this institution provides training to those Indian students desirous of learning an employable skill. Some 70 different tribes are represented in the student body of more than 500. When the physical plant is completed, it will accommodate twice that number.

SIPI is a post-secondary school, for students between the ages of 16-26, but a high school equivalency (GED) program is offered to students who have not graduated from high school, and college accreditation for some courses is possible.

John L. Peterson, "Our basic philos individual to ente all of the technica skills necessary nebut to obtain job tions. In order to SIPI has surveyed those occupation demands for labo supply, and has go curriculum to me

Programs offered tical technology, communications, aides, commercial ness education, detechnicians. When pleted, additional in auto body and mechanics, aircrafframe, welding, ment repair, applibuilding and cons

Dr. Otto A. Stang planning, said the grams offered at S trend toward voca society in which if the services of a dother professional a plumber, an election

"The American pe





Southwestern Indian Polytechnic Institute

stitute at Albuquerque is a unique school in the Bureau of Indian Affairs. Built in 1971 on a 164-acre campus in the lovely north valley of Albuquerque, this institution provides training to those Indian students desirous of learning an employable skill. Some 70 different tribes are represented in the student body of more than 500. When the physical plant is completed, it will accommodate twice that number.

SIPI is a post-secondary school, for students between the ages of 16-26, but a high school equivalency (GED) program is offered to students who have not graduated from high school, and college accreditation for some courses is possible.

John L. Peterson, the superintendent, said: "Our basic philosophy is to prepare each individual to enter the world of work with all of the technical and communications skills necessary not only to earn a living, but to obtain job satisfaction and promotions. In order to achieve this realistic goal, SIPI has surveyed the job market, found those occupational areas in which the demands for labor significantly exceed the supply, and has geared its occupational curriculum to meet those demands."

Programs offered include electronics, optical technology, offset lithography, telecommunications, drafting, engineering aides, commercial food preparation, business education, dental assistants and dental technicians. When the plant is fully completed, additional programs will be offered in auto body and fender, automotive mechanics, aircraft power plant and air frame, welding, machine shop, heavy equipment repair, appliance repair, and the building and construction trades.

Dr. Otto A. Stangl, director of research and planning, said the career education programs offered at SIPI conform to a national trend toward vocational education in a society in which it is often easier to obtain the services of a doctor or a lawyer or some other professional person than it is to find a plumber, an electrician or carpenter.

"The American people," he said, "are coming to appreciate the skills of the





tradesman, and the financial rewards are frequently better than that of some professional persons. There is a definite change in national attitude."

SIPI provides a two-year program, but the "educational ladder" concept is used, i.e., the individual sets his own educational goals as to how far on the ladder he wishes to climb. The individual student also sets his own pace, moving up the ladder toward his goal at his best speed.

In addition to occupational training, students receive supportive educational programs that provide skill development in communications and job adjustment. Students also receive academic courses, such as mathematics and English, but, as Dr. Stangl put it, "our prime objective is vocational education, and our students learn by doing." Unlike many young persons of comparable age, the young men and women at SIPI know what they want to do and have set their courses.

Living and working school have been ble. Dormitories ling, television, fair and arts and craft are in each dormit dents to use, if the school.





nancial rewards are n that of some profesis a definite change in

ear program, but the concept is used, i.e., own educational the ladder he wishes ual student also sets up the ladder toward red.

In addition to occupational training, students receive supportive educational programs that provide skill development in communications and job adjustment. Students also receive academic courses, such as mathematics and English, but, as Dr. Stangl put it, "our prime objective is vocational education, and our students learn by doing." Unlike many young persons of comparable age, the young men and women at SIPI know what they want to do and have set their courses.

Living and working conditions at the school have been made as pleasant as possible. Dormitories have wall-to-wall carpeting, television, family rooms, recreation and arts and crafts areas. Private kitchens are in each dorm for the families of students to use, if they desire, when visiting the school.





Navajo Social Studies

Navajo cult learning about othe provided for Navajo was implemented r the 1972-73 school in select schools du years.

The social studies c developed by Burez Area in cooperation alists and professor sities — the Univers the University of W materials that were or irrelevant for Na





Navajo Social Studies

Navajo culture as a springboard for learning about other cultures, has been provided for Navajo students. The program was implemented reservation-wide during the 1972-73 school year after being piloted in select schools during the previous two years.

The social studies curriculum, which was developed by Bureau teachers in the Navajo Area in cooperation with Navajo traditionalists and professors from two universities — the University of New Mexico and the University of Washington — replaces materials that were considered inadequate or irrelevant for Navajo students.







Julia Moore Mose (left) she attended as a child—Boarding School on the Mrs. Mose, the mother o graduate of New Mexico and has her Master's deg from the University of V

Dan Daniels, a teacher at Chinle Boarding School, considered the previous materials so deficient he discarded them and devised some social studies units of his own. Robert Henion of Tohatchi Boarding School did the same thing. Daniels and Henion, and other social studies teachers across the reservation who were dissatisfied with the previous materials, thus were ready with input when a move began during the 1966-67 school year to develop curricula based on the specific needs of Navajo children.

Dr. Leroy Condie of the University of New Mexico, a former, longtime educator on the

Navajo reservation, developed a series of culturally-based units. A contract was negotiated with the University of Washington to develop social studies curricula guidelines for Beginners through Eighth grade.

Writers at the University of Washington, under the direction of Dr. Theodore Kaltsounis, were provided with the social studies needs of Navajo children, as identified by such "grassroots" authorities as the Navajo Tribal Education Committee, school board members, parents and Navajo teachers, including Mrs. Janet Hermes, a veteran teacher at Chinle Boarding School.

The writers made free reservation for consu Writing and reproduc was completed in 19 were piloted on a lim years by teachers wh training in their use.

The Navajo social stucontrast to the previathe many contribution indian has made to t tionship to other cul Navajo student an in place in American hi







Julia Moore Mose (left) teaches at the school she attended as a child — the Crystal Boarding School on the Navajo Reservation. Mrs. Mose, the mother of two daughters, is a graduate of New Mexico Western University and has her Master's degree in Social Studies from the University of Washington.

Chinle Boarding revious materials them and devised of his own. thi Boarding g. Daniels and studies teachers o were dissatisfied als, thus were ready began during the evelop curricula ds of Navajo

University of New me educator on the

Navajo reservation, developed a series of culturally-based units. A contract was negotiated with the University of Washington to develop social studies curricula guidelines for Beginners through Eighth grade.

Writers at the University of Washington, under the direction of Dr. Theodore Kaltsounis, were provided with the social studies needs of Navajo children, as identified by such "grassroots" authorities as the Navajo Tribal Education Committee, school board members, parents and Navajo teachers, including Mrs. Janet Hermes, a veteran teacher at Chinle Boarding School.

The writers made frequent visits to the reservation for consultation and evaluation. Writing and reproducing of the guidelines was completed in 1970, and the guidelines were piloted on a limited basis for two years by teachers who had received special training in their use.

The Navajo social studies curriculum, in contrast to the previous materials, shows the many contributions the American Indian has made to this country, his relationship to other cultures and gives the Navajo student an insight into his rightful place in American history.





Hometown Hopi Principal



Young man who was born and raised at Hotevilla, on the Hopi reservation, is back as principal of the local school. He is Vernon Maseyesva, 31, who began his education within a stone's throw of the present school, finished high school in Phoenix, then went on to acquire a degree from Arizona State University and a master's degree in community education from Central Michigan University. He knows nearly all of the 800 residents of Hotevilla



and the neighboring village of Bacavi, from which Hotevilla Day School draws its enrollment of about a hundred pupils.

He sees in his students problems that he encountered 25 years ago, and he is distressed by the fact that lack of education has contributed to the high unemployment rate at Hotevilla and Bacavi and elsewhere on the Hopi reservation.

He has a double-barreled goal: To improve the education program at his school so that Hopi students will be better prepared for further education, and to provide an adult education program for those that have completed their schooling. "This school sits idle for much of the year," he said. "I would like to provide a year-round education program for students and for members of the community."

He has started a fine arts program for children and adults in a drafty, old building that was abandoned when the present school was constructed three years ago. Here, students and adults come in the afternoons and evenings to weave and to become involved in the ceramic process, thus helping to preserve Hopi culture and providing income.

Maseyesva would like to see his people trained to operate small businesses. He is seeking a grant to start a course in automobile mechanics, and has the instructor for such a program. One of his staff members, Herman Masaquaptewa, has com-

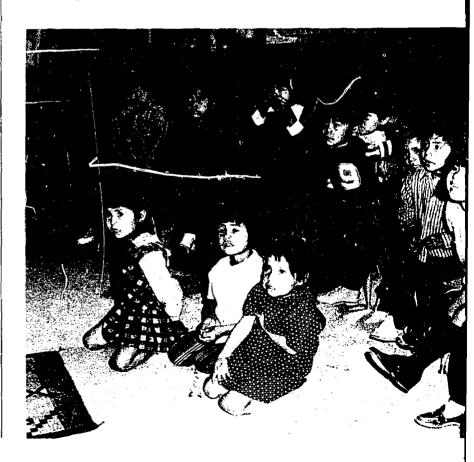
pleted a course at the General Motors Training Institute.

"I'm trying to break down the invisible barrier that has been built up between the school and the people," he declared.

Helping him do this is Riley Balenquah, 28, of Bacavi, who is community development and training director and conducts a recreation program for students.

Hotevilla's Advisory members was the fil formed on the reser four other Bureau d bination boarding s Keams Canyon, the

The Advisory Composite in school affain selection of the s





llage of Bacavi, from chool draws its enindred pupils.

problems that he ago, and he is distance t lack of education high unemployment acavi and elsewhere n.

ed goal: To improve at his school so that netter prepared for to provide an adult those that have ling. "This school sits ear," he said. "I a year-round educants and for members

rts program for chilafty, old building hen the present d three years ago. Alts come in the gs to weave and to e ceramic process, we Hopi culture and

to see his people
II businesses. He is
t a course in autoI has the instructor
he of his staff memptewa, has com-

pleted a course at the General Motors Training Institute.

"I'm trying to break down the invisible barrier that has been built up between the school and the people," he declared.

Helping him do this is Riley Balenquah, 28, of Bacavi, who is community development and training director and conducts a recreation program for students.

Hotevilia's Advisory Committee of seven members was the first such body to be formed on the reservation, where there are four other Bureau day schools and a combination boarding school-public school at Keams Canyon, the agency headquarters.

The Advisory Committee has an active voice in school affairs and had a voice in selection of the school's 13 employees.







Pre-school Children

n early childhood education program, operated by the Devils Lake Sioux tribal education committee at the Fort Totten Agency in North Dakota, is functioning well. More than 100 three and four year olds are enrolled in programs at two centers on the reservation.

Staff members re daily evaluation if of school, find bo progress. When th school, lessons w ties to make the d and glad they we activities were un and "I'm Glad I'n the children gaine ity, they progress flannel board stor activities. By midcould correctly di put together "ped of September the the body, face, an

Clothing served as color, shape, size, All four-year-olds yellow, blue and gorange and brown now match colors now identify ten of

Another example occurred at each of there was a child who was reluctant ties. Now, both cherbally to the adding to work with thas begun to sing, offer an initial green.





ool

n early childhood education program, operated by the Devils Lake Sioux tribal education committee at the Fort Totten Agency in North Dakota, is functioning well. More than 100 three and four year olds are enrolled in programs at two centers on the reservation.

Staff members reviewing the lesson and daily evaluation plans since the beginning of school, find both group and individual progress. When the children first came to school, lessons were centered around activities to make the children feel comfortable and glad they were at school. Soon the activities were units such as "Who Am I?" and "I'm Glad I'm Me" (self-concept.) As the children gained confidence and security, they progressed to participating in flannel board stories and manipulative activities. By mid-September most of them could correctly dress flannel figures and put together "people puzzles." By the end of September they could identify parts of the body, face, and articles of clothing.

Clothing served as a transition to lessons on color, shape, size, and position concepts. All four-year-olds can now match red, yellow, blue and green. Most can match orange and brown. Most three-year-olds can now match colors. One four-year-old can now identify ten colors.

Another example of individual progress occurred at each center. In each location there was a child who would not speak, and who was reluctant to participate in activities. Now, both children are responding verbally to the adults and are usually willing to work with their groups. One of them has begun to sing, and the other will now offer an initial greeting.

All children have progressed from simple manipulation of crayons (scribbling) to attempts to stay within lines or draw something meaningful to them.

At each center a small group of four-yearolds has grown reliable enough to do an independent (no adult at the table) activity. Sometimes these activities are "free choice" and sometimes the materials are teacher chosen, but the child is given the freedom to express himself within the teacher chosen framework. As an evaluation of her own judgments about pupil progress, a teacher asked a group to draw "How You Feel Today." From this activity, she got an idea of the child's attitude toward himself, his manipulative development (crayon control), his willingness to cooperate and complete his task, his willingness to tell about his picture, and his reading readiness (the completeness of the picture). The pictures were much more detailed about the face than those drawn at the beginning of the year, but none of these children drew a complete person with head, body, arms, and legs. It was interesting to note that the quiet child drew her picture in yellow, and the changeable child used both orange and purple, drew in a smile, and then added a large purple tear.

One group of children, for whom singing seemed a new experience in the fall, now has a repertoire of seventeen songs, some of which are for fun and some of which also teach a little lesson.

Judged from evaluation of both parents and staff, the students are much more willing to talk. Most understand and can identify several position concepts, but a few still do not verbalize "beside."

Most students recognized their printed name and can match the letters to their names. One group noticed that three of them had names beginning with "B." This sparked a discussion of the sound "B" makes, and because they were interested in sounds, and had previously done work in sound discrimination at a basic level, they have begun work with the sounds given to letter symbols. It is hoped that these children will read simple words by spring.

Staff members can see from the daily lesson plans and evaluations, and from the individual profile assessments of each child that both intellectual and social growth has taken place.

Mothers who work in the centers have been asked to fill out evaluation sheets on the program and the progress they note between their work schedules. Since this type of evaluation has only begun, there is only a sampling of opinion, but all parents in this sample feel their own child shows progress, that the program is good preparation for later school experiences, and that community attitude toward the program is very good.





ogressed from simple yons (scribbling) to hin lines or draw ful to them.

all group of four-yearble enough to do an ult at the table) activiactivities are "free nes the materials are the child is given the himself within the iework. As an evaluagments about pupil isked a group to draw lay." From this activif the child's attitude manipulative developbl), his willingness to lete his task, his willhis picture, and his he completeness of the es were much more ace than those drawn at vear, but none of a complete person with nd legs. It was interestquiet child drew her nd the changeable child nd purple, drew in a ed a large purple tear.

en, for whom singing rience in the fall, now eventeen songs, some of the some of which also

Judged from evaluation of both parents and staff, the students are much more willing to talk. Most understand and can identify several position concepts, but a few still do not verbalize "beside."

Most students recognized their printed name and can match the letters to their names. One group noticed that three of them had names beginning with "B." This sparked a discussion of the sound "B" makes, and because they were interested in sounds, and had previously done work in sound discrimination at a basic level, they have begun work with the sounds given to letter symbols. It is hoped that these children will read simple words by spring.

Staff members can see from the daily lesson plans and evaluations, and from the individual profile assessments of each child that both intellectual and social growth has taken place.

Mothers who work in the centers have been asked to fill out evaluation sheets on the program and the progress they note between their work schedules. Since this type of evaluation has only begun, there is only a sampling of opinion, but all parents in this sample feel their own child shows progress, that the program is good preparation for later school experiences, and that community attitude toward the program is very good.





School Board Training

In May of 1972, some 320 Navajo school board members received diplomas (Certificates of Training) for completing three years of training in the duties and responsibilities of being school board members. Many of the school board members spoke little or no English, but they had gained insight into the operation of the Bureau of Indian Affairs' schools on the Navajo reservation.

The three-year training program was conducted by Dr. Irving W. Stout and Wayne T. Pratt of Arizona State University. Dr. Stout and Pratt developed a booklet, "A Manual For Navajo Community School

Board Members," which was particularly suited to the needs of Navajo people.

At the end of the training program, a slide film was developed for use in future training. The slide presentation is narrated in Navajo by Bob J. King, chief of the Branch of Educational Liaison in the Navajo Area.

From the training program a text, Navajo Community School Boards Speak Out, was developed, which portrays a wide range of Navajo thought on many educational matters. Accompanying the text is a Summary Report of Training Activities, by Dr. Stout and Pratt.

The Navajo people have become increasingly involved in the education of their children through Navajo school boards. Though these boards have only limited authority and are advisory in nature, members are well aware of the power they do have, and the fact that school boards provide the vehicle for increased community participation in school matters.

In the Navajo Nation, there are 59 boards serving 66 schools. A few serve more than one school. Local boards range in number from 3-to-7 members and usually meet once a month at the school with the principal. The agency board is comprised of one member from each of the local boards, and two members from each agency serve on a 10-member Interagency School Board, which oversees off-reservation boarding schools attended by Navajo students.

School board no various chapters bers receive not the expense of

School board to once a month a Crownpoint, Sh and Fort Defian

School boards a BIA, as a few so boards dating b only in recent y was made to for schools.

On the Navajo red in 1967, followasio Area edd was. "To seek nent of parents education progr

Two years later Navajo Tribal C lished the Navaj Board Act, an a vision and signif provided the leg and operation o agency school b board, to the en schools could be schools represer ing the needs of



Board Members," which was particularly suited to the needs of Navajo people.

At the end of the training program, a slide film was developed for use in future training. The slide presentation is narrated in Navajo by Bob J. King, chief of the Branch of Educational Liaison in the Navajo Area.

From the training program a text, Navajo Community School Boards Speak Out, was developed, which portrays a wide range of Navajo thought on many educational matters. Accompanying the text is a Summary Report of Training Activities, by Dr. Stout and Pratt.

The Navajo people have become increasingly involved in the education of their children through Navajo school boards. Though these boards have only limited authority and are advisory in nature, members are well aware of the power they do have, and the fact that school boards provide the vehicle for increased community participation in school matters.

In the Navajo Nation, there are 59 boards serving 66 schools. A few serve more than one school. Local boards range in number from 3-to-7 members and usually meet once a month at the school with the principal. The agency board is comprised of one member from each of the local boards, and two members from each agency serve on a 10-member Interagency School Board, which oversees off-reservation boarding schools attended by Navajo students.

School board members are elected by the various chapters, on a yearly basis. Members receive nominal compensation to cover the expense of attending meetings.

School board training sessions are held once a month at agency headquarters — Crownpoint, Shiprock, Tuba City, Chinle and Fort Defiance.

School boards are not a new idea in the BIA, as a few schools have had community boards dating back to the 1930s. But it was only in recent years that a concerted effort was made to form boards at all of the BIA schools.

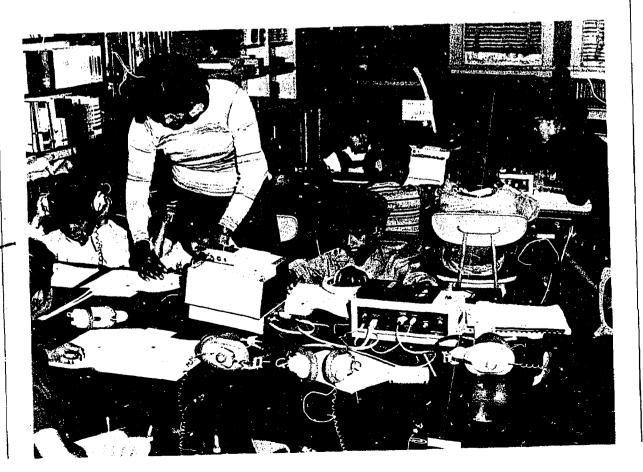
On the Navajo reservation, the effort started in 1967, following formulation of Navajo Area education goals, one of which was, "To seek maximum, feasible involvement of parents and tribal leaders in the education program."

Two years later, on August 8, 1969, the Navajo Tribal Council, by resolution, established the Navajo Community School Board Act, an action far-sighted in its vision and significant in its potential. It provided the legal basis for the organization and operation of local school boards, agency school boards, and an Interagency board, to the end that Navajo community schools could become truly community schools representing the wishes and meeting the needs of the community.

me 320 Navajo school eceived diplomas (Certior completing three he duties and responool board members, poard members spoke but they had gained ation of the Bureau of the Navajo

ng program was con-W. Stout and Wayne tate University. Dr. loped a booklet, "A community School

Teacher Training



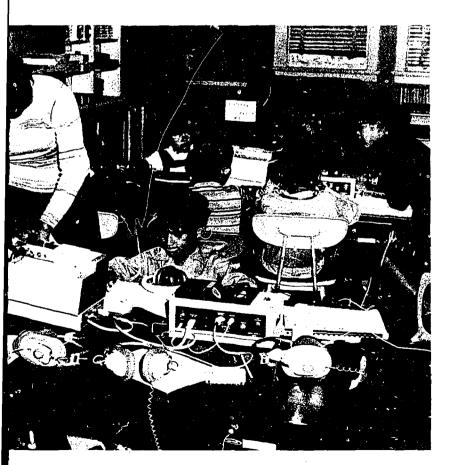
a difficult art. education staff men reservation acknow they showed up at liversity this summer week learning progrational grammar, and Navajo and English.

A 1970 evaluation h in the Area's efforts lems of teaching En speaking children, E cribed as dull, mech and in many instand pupils' capacities as formance in other s acknowledged their in what they were d most training assist was in the nature of inars and workshop siderable resistance quired authorized t Series) to be used 5 addition, ESL rarely as an integral part c ing the linguistic ne areas.

Better and longer-towas clearly needed



Teacher Training



Teaching English as a second language is a difficult art. More than 220 BIA education staff members from the Navajo reservation acknowledged this fact when they showed up at Northern Arizona University this summer for an intensive fiveweek learning program stressing transformational grammar, and contrastive analysis of Navajo and English.

A 1970 evaluation had shown weaknesses in the Area's efforts to cope with the problems of teaching English to the Navajo speaking children, ESL classes were described as dull, mechanical, unimaginative and in many instances pitched below the pupils' capacities as demonstrated by performance in other subject areas. Teachers acknowledged their own lack of confidence in what they were doing in ESL classes and most training assistance available to them was in the nature of very short term seminars and workshops. There was also considerable resistance to the sole use of required authorized texts (American English Series) to be used 50 minutes a day. In addition, ESL rarely seemed to be viewed as an integral part of the curriculum, serving the linguistic needs of other subject areas.

Better and longer-term teacher education was clearly needed and something had to



be done to get away from the imposition of one set of materials and one uniform time period for the daily ESL instruction.

The summer program at Northern Arizona was one step to improve the situation. The program was set up and supervised by Mrs. Faralie Spell, education specialist for the Navajo Area.

In the summer of 1971 a similar workshop was held at Northern Arizona for Area language arts specialists and teachers who had demonstrated potential for teaching second languages. This workshop provided participants with some knowledge and experience in materials writing.

An outgrowth of this workshop was the Navajo Area Language Arts Project (NALAP). The main objective of the project is to develop a sequence of the grammatical structures of the English language based upon the particular language needs of Navajo children in the setting in which they are using the language. These materials supplement the Navajo Area Language Arts Curriculum Guidelines which provide activities for meeting universal language needs of children.

The NALAP materials are being developed so that imposition of any one set of materials is eliminated.

Development of another set of materials designed specifically for Navajo children is being carried out by Consultant's in Total

Education (CITE) under the direction of Dr. Robert Wilson at the University of California at Los Angeles. These materials represent the best of present scholarship in the relevant fields of linguistics, child psychology, sociology and education. They very much reflect a concern for how what is taught can best be learned. Emphasis is on learning how to learn.

Rather than attempting to bend existing materials to suit its own purposes, CITE has developed and refined a total program of its own for beginners and a total language arts program for first grade. The second grade program is being implemented in the 1972-73 school year.

Participants in the '72 Northern Arizona program had the opportunity to learn more about these two sets of materials and to work together in sub-groups for planning program applications in their classrooms this year.

The five-week program helped these teachers, principals and other education staff members to become more knowledgeable of English, develop some understanding of how the language functions, become more aware of the problems second language learners encounter, become more sensitive to the specific problems of Navajo children and youth in learning English and learn, to some degree at least, how to apply this knowledge and understanding in their classrooms.





om the imposition of done uniform time
L instruction.

at Northern Arizona we the situation. The d supervised by Mrs. In specialist for the

I a similar workshop Arizona for Area is and teachers who ential for teaching workshop provided knowledge and s writing.

workshop was the Arts Project bjective of the sequence of the s of the English lanparticular language in the setting in he language. These the Navajo Area alum Guidelines as for meeting unipf children.

are being developed any one set of materi-

per set of materials or Navajo children is onsultant's in Total Education (CITE) under the direction of Dr. Robert Wilson at the University of California at Los Angeles. These materials represent the best of present scholarship in the relevant fields of linguistics, child psychology, sociology and education. They very much reflect a concern for how what is taught can best be learned. Emphasis is on learning how to learn.

Rather than attempting to bend existing materials to suit its own purposes, CITE has developed and refined a total program of its own for beginners and a total language arts program for first grade. The second grade program is being implemented in the 1972-73 school year.

Participants in the '72 Northern Arizona program had the opportunity to learn more about these two sets of materials and to work together in sub-groups for planning program applications in their classrooms this year.

The five-week program helped these teachers, principals and other education staff members to become more knowledgeable of English, develop some understanding of how the language functions, become more aware of the problems second !anguage learners encounter, become more sensitive to the specific problems of Navajo children and youth in learning English and learn, to some degree at least, how to apply this knowledge and understanding in their classrooms.





Boarding Schools



no part of the B received greated ing schools. Most At the fact that studen students, have to be parents.

The Bureau recognischools are not the tion, but they are n conditions found or isolated areas with nomic status and, it unsatisfactory hom these conditions has boarding schools ar of life.

Boarding schools ar younger children, a voted much of its e dormitory life for t

At Toyei Boarding Reservation, a Mod been going on for t cooperative venture U.S. Public Health determining what of ized care and atten these beginners and six, seven and eight

During the 1972-7 beginners and first school enrollment volved in the Mode



Boarding Schools



o part of the Bureau's operations has received greater attention than boarding schools. Most Americans find unpalatable the fact that students, particularly young students, have to be separated from their parents.

The Bureau recognizes that boarding schools are not the ideal educational situation, but they are necessary because of the conditions found on Indian reservations—isolated areas with poor roads, low economic status and, in some cases, unsatisfactory home environment. Until these conditions have been improved, boarding schools are likely to remain a fact of life.

Boarding schools are least desirable for younger children, and the Bureau has devoted much of its efforts toward easing dormitory life for them.

At Toyei Boarding School, on the Navajo Reservation, a Model Dorm project has been going on for three years. This is a cooperative venture of the BIA and the U.S. Public Health Service, with the aim of determining what effect more individualized care and attention would have on these beginners and first-graders, children six, seven and eight years old.

During the 1972-73 school year, about 187 beginners and first-graders, out of a total school enrollment of some 690, were involved in the Model Dorn program.



The instructional aide-per-pupil ratio in the Model Dorm has been about 1-15 compared with about 1-60 in the average BIA dorm.

Psychologists from the U.S. Public Health Service have served as partners, consultants and advisors in the endeavor.

A Community Resource Aide, who is Navajo, has served as a liaison between the school and the community.

Mothers have been brought into the dormitory at night to teach the girls how to card wool, to spin and to weave. And fathers have come into the dorm to teach art to the boys.

The endeavor has shown, not surprisingly, that the children in this dorm are happier and feel more secure than children in comparable dormitory situations.

And, according to those involved, it has also shown that these children are making more progress in the classroom than those in a comparable situation.

"We realize we can't bring the home into the dormitory, but we've brought part of it in," said Gail Powers, the supervisor of the Model Dorm.

The only problem is, the Bureau simply does not have enough money to staff all of its dormitories as it has the Model Dorm.

With the regular staffing, the few instructional aides in a dormitory have their hands







er-pupil ratio in the pout 1-15 comn the average BIA

U.S. Public Health artners, consultants tavor.

Aide, who is iaison between the ity.

ght into the dormne girls how to card ave. And fathers n to teach art to

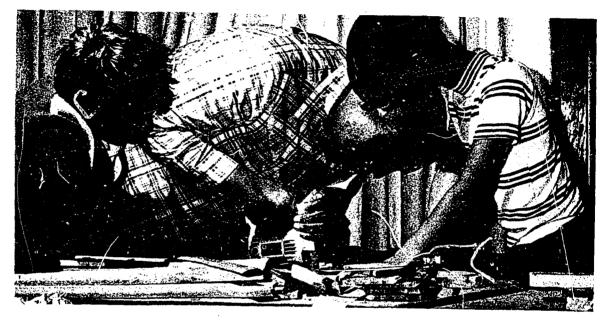
, not surprisingly, dorm are happier in children in comions.

involved, it has ildren are making ssroom than those n.

ng the home into e brought part of it e supervisor of the

e Bureau simply oney to staff all of the Model Dorm.

, the few instrucry have their hands











full in caring for any sick children, making sure that all are accounted for, seeing that the children are bathed, and ironing, washing and mending clothing.

In recent years, the Bureau has adopted a much more flexible guidance (dormitory) program. Where each dorm on a campus previously was virtually autonomous, total campus interaction is now sought. There is much more social contact than previously.

Secondary boarding schools in the Bureau have Honor Dorms for those students who have demonstrated that they are mature enough to be allowed maximum freedom of movement both on-and-off campus and minimum supervision.

The residents of these Honor Dorms take pride in their living situation and police their own members. If a student abuses his privileges, disciplinary action is taken by his peers.

Older students in the boarding schools have to do much of the housekeeping work themselves, such as washing and ironing their own clothes. Junior high students do their own washing, but instructional aides do the ironing. For young children, of course, all of this has to be done by instructional aides.

All of the large boarding schools on the Navajo Reservation, where a large number of the BIA's boarding schools are located, have student activities directors, who pro-



duce programs that keep students occupied during out-of-school hours and reduce incidences of misbehavior and vandalism.

Indian Clubs have been formed in the schools. Schools have student canteens, where students congregate to eat hamburgers, drink pop and listen to the latest records on the juke box. Schools have weekly movies, television, reading rooms and recreation areas.

At Shonto Boarding School, the student canteen is a busy place all week long but especially so on Wednesday afternoons. That's when Navajo Tacos, a delicacy unique to the reservation, are served. The Navajo Taco is a combination of fry bread, beans, chili and cheese. Staff members donate their time to help the students as cooks, busboys and waiters. Proceeds from the canteen go toward financing student activities, such as trips by the football team and the band.

Parents are encouraged to take their chilaren home on weekends, and statistics have shown that, on the average, about a third of the students go home each weekend. When the weather is good, more than half go home each weekend.

Some boarding schools are taking some of their students on a day basis. Notable examples are Lukachukai and Pinon boarding schools. They are in areas in which paved roads have been built, enabling the schools to convert to boarding-day schools.

But, for many students, boarding school, with the exception of regular school holidays, is a nine-month proposition.

It is for these students that the Bureau strives continuously to make their homeaway-from-home as pleasant as possible.





.

o students occupied urs and reduce or and vandalism.

formed in the udent canteens, ate to eat hamlisten to the latest. Schools have on, reading rooms

hool, the student all week long but day afternoons. os, a delicacy n, are served. The nation of fry bread, Staff members p the students as ters. Proceeds from inancing student by the football team

to take their chils, and statistics have age, about a third e each weekend.

are taking some of basis. Notable ai and Pinon boardareas in which built, enabling the parding-day schools. But, for many students, boarding school, with the exception of regular school holidays, is a nine-month proposition.

It is for these students that the Bureau strives continuously to make their homeaway-from-home as pleasant as possible.





Individualization



Students at the Acomita Day School on the Acoma reservation, 60 miles west of Albuquerque, New Mexico, work on individual assignments and at their own rate of speed. One might be working on math, while another works on science, or language arts. Individual instruction allows a teacher to attack a student's weakness — to give extra time and attention to areas in which a student needs improvement.

Individually Guided Education (IGE) gives the slow-learner more time to learn. It provides similar flexibility for the fast-learner. There's no stigma attached to being a slow-learner, or being weak in a particular subject. The goal is to help each student to develop his own potential.

The traditional classroom scene is not in evidence at Acomita Day School and at two other schools in the Albuquerque Area — Jernez and Zia. They are the first schools in the Bureau of Indian Affairs to participate in IGE.

Students have a great deal of personal freedom, including movement within three or four different classrooms, as they go through their daily learning programs.

Lest this sound like Huckleberry Finn's idea of school, there is one catch. The student has to produce. He has, in effect, made a contract with the teacher, to do a certain amount of work, in a certain subject, within a stipulated period of time.

He drew his assignment from a "contract board," a chart almost as big as a black-board. Individual cards placed under the student's name give the nature of the assignment, the references for doing the assignment and the time allotted. There are different colored cards for each day of the week. The first thing the student does in the morning is go to the contract board and see what assignments he has.

According to the teachers at Acomita, IGE requires more work on the part of the teacher but is worth it. They say that IGE permits them to evaluate a student's capabilities much better than in the traditional classroom situation. More important, they believe that IGE is enhancing the education of their students.

IGE is the big tent under which participating schools operate. It does not specify what type of curriculum, materials or techniques should be used, but rather serves as a vehicle for facilitating the individualization of instruction.

The school is ungraded, with progress reports prepared and shared with parents at periodic intervals in a parent-teacher conference setting. IGE units include a number of students (50 to 125) and teachers (2 to 5) and cut across at least two, and preferably three, age groups.

This approach to education is the result of research done by the Wisconsin Research and Development Center for Cognitive

Learning, and other The Institute for th cational Activities, of Charles F. Kettering has been largely res national expansion





Mrs. Laura Garcia, wit the Acomita Day Schc Reservation. She is a g Western University.



Day School on the les west of Alwork on individuir own rate of king on math, cience, or lanruction allows a nt's weakness — to tion to areas in provement.

cation (IGE) gives ne to learn. It y for the fasta attached to being yeak in a particular Ip each student to

scene is not in School and at Albuquerque hey are the first Indian Affairs to

al of personal ment within three oms, as they go ing programs.

kleberry Finn's
ne catch. The
He has, in effect,
e teacher, to do a
in a certain
ted period of time.

He drew his assignment from a "contract board," a chart almost as big as a black-board. Individual cards placed under the student's name give the nature of the assignment, the references for doing the assignment and the time allotted. There are different colored cards for each day of the week. The first thing the student does in the morning is go to the contract board and see what assignments he has.

According to the teachers at Acomita, IGE requires more work on the part of the teacher but is worth it. They say that IGE permits them to evaluate a student's capabilities much better than in the traditional classroom situation. More important, they believe that IGE is enhancing the education of their students.

IGE is the big tent under which participating schools operate. It does not specify what type of curriculum, materials or techniques should be used, but rather serves as a vehicle for facilitating the individualization of instruction.

The school is ungraded, with progress reports prepared and shared with parents at periodic intervals in a parent-teacher conference setting. IGE units include a number of students (50 to 125) and teachers (2 to 5) and cut across at least two, and preferably three, age groups.

This approach to education is the result of research done by the Wisconsin Research and Development Center for Cognitive

Learning, and other educational agencies. The Institute for the Development of Educational Activities, established by the Charles F. Kettering Foundation in 1965, has been largely responsible for the national expansion of the program.





Mrs. Laura Garcia, with three of her students at the Acomita Day School, was born on the Acoma Reservation. She is a graduate of New Mexico Western University.





Open Classroom

40

"Today I am going to draw," announced a boy as he rushed into the classroom and went straightway to the art center. "I must build a mail box for our letters," replied another. A third said he was going to work in the grocery store.

And so they came, eager and ready for fun and learning at a new kind of school. The Concho Indian School, located near El Reno, is among the first schools in Oklahoma to experiment with the "open classroom" concept.

The class is non-graded, of course. Instruction serves the five year old as well as the eight year old and all those in between because teachers tailor-make the learning activities to fit the needs and/or interests of each child. The spectrum of learning experiences, beginning with readiness activities, include exploration and discovery, problem-solving, the inquiry process, self-direction, and responsibility. A general atmosphere of excitement permeates this spacious, gaily colored room built purposely to implement the open classroom concept.

The major difference between an open classroom and the traditional type is the philosophy supporting the planning and implementation. Freedom to explore and discover as a means of concept development is reflective in the term "open." In an open classroom there is freedom to move about the room without the teacher's permission, opportunities to work with a

buddy, and even sit on the floor to complete the task at hand, if it's more comfortable.

Not only is there freedom to choose an activity, but freedom to arrive at the finish line according to one's own speed. Perhaps an even more distinctive characteristic is the flexibility within the curruculum. What to learn, when to learn, and how to learn is a cooperative decision of the student and teacher. No bells ring, no "line-ups" are required, students have no desks and no assigned space. They live and learn in an informal, "family-type" climate, working at tables or relaxing on the floor depending on the nature of the activity.

A day in an open classroom seems to be just the prescription for intellectual challenge and social interaction. Interest centers with their stimulating suggestions line the walls, fill the corners, and even spread out in the center of the room with the use of stand-up charts. A child has time to explore and make discoveries about himself.

Many children find the two rocking chairs in the library center inviting. The library center is a relaxing place where children may select from a wide variety of reading materials. There are picture books, story books, magazines, adult's and children's newspapers, books by classic authors, paper back books, basal reader materials, reference books, and a film strip viewer for

individuals or smal is large enough for the teacher during Study carrels are o when one has a bea needs a carrel!?

Next to the library with a record play listening post with records used for a vinused in this area or tapes for the purchildren to read alc Recordings to reinfination and a variet machines may be for





draw '' anno

draw," announced a the classroom and the art center. "I must in letters," replied the was going to work

er and ready for fun kind of school. The , located near El st schools in Oklaith the "open class-

I, of course. Instrucir old as well as the hose in between -make the learning ds and/or interests of um of learning experreadiness activities, id discovery, proby process, self-direcy. A general atmosermeates this spaom built purposely to lassroom concept.

between an open ditional type is the g the planning and dom to explore and concept developae term "open." In an is freedom to move ut the teacher's ties to work with a

buddy, and even sit on the floor to complete the task at hand, if it's more comfortable.

Not only is there freedom to choose an activity, but freedom to arrive at the finish line according to one's own speed. Perhaps an even more distinctive characteristic is the flexibility within the curruculum. What to learn, when to learn, and how to learn is a cooperative decision of the student and teacher. No bells ring, no "line-ups" are required, students have no desks and no assigned space. They live and learn in an informal, "family-type" climate, working at tables or relaxing on the floor depending on the nature of the activity.

A day in an open classroom seems to be just the prescription for intellectual challenge and social interaction. Interest centers with their stimulating suggestions line the walls, fill the corners, and even spread out in the center of the room with the use of stand-up charts. A child has time to explore and make discoveries about himself.

Many children find the two rocking chairs in the library center inviting. The library center is a relaxing place where children may select from a wide variety of reading materials. There are picture books, story books, magazines, adult's and children's newspapers, books by classic authors, paper back books, basal reader materials, reference books, and a film strip viewer for

individuals or small groups to use. The area is large enough for children to sit around the teacher during story sharing periods. Study carrels are only a few feet away, but when one has a beautiful, soft rug, who needs a carrell?

Next to the library is the listening center with a record player, tape recorder, and a listening post with headsets. Tapes and records used for a variety of purposes are housed in this area. Also, there are records or tapes for the purpose of encouraging children to read along with the recording. Recordings to reinforce auditory discrimination and a variety of other teaching machines may be found in this center.







Typewriters, printing sets and chalkboards are among the wide variety of materials found in the writing center. Story starters, pictures, magazines, puzzles and games are only a few of the irresistible materials that children use when they visit this area.

The art center provides paints, brushes, paper of all types, clay, felt markers, and many other inviting media for the child's experiments and creations. There are plastic covers for the rugs, just in case a little paint is "misplaced."

The children's art work provides constant input for new experience stories and for other types of writing and reading materials. For example, one favorite activity during summer was to write or dictate how to make certain things, adding these

pages to the THING TO MAKE book which was kept in the art center.

The carpentry center contains cardboard boxes, a workbench, and tools. Boys from older classes are particularly helpful in the construction activities in this center. Reluctant readers have a real purpose for reading as they follow the construction directions.

The science center containing many of the objects from the real world is carefully designed to encourage observation and probing. Magnifying glasses, animals, an aquarium, and plants are just a few of the items provided. Materials to make folders and books are available. Children may write or illustrate their discoveries and observations. Easy access to science magazines and books which contain needed information makes this a popular spot. Classifying shells and other objects calls for research, labeling, and mounting.

The dramatization center (playhouse) has unlimited possibilities. Often it is designed to follow a particular unit of interest. The puppets, dress-up clothes, dishes, stove, and a full length mirror are among the objects. This center can be changed to represent a house, a kitchen, a school, a store, or any number of interesting settings. Frequently, the teacher records the dialogue that occurs in this center, writes it on dialogue balloons as in the comic strips, and uses it for reading purposes. Can you think of a better way to help the child realize that print is just speech written down?

The blocks and gar less possibilities, it and many of the comade games of lanchildren learn to sh as they work with of this center also a teacher's careful di and upon careful p that he is able to so designed to help his

The math center is materials for teach matical concepts. If are not limited to ever. Liquid measurement in the children read and if measurement is lead measure and build

Time and seasonal in their natural pla the science center. can be learned as t grocery bills or as clerk in the store.

Teachers and aides children, take dict construct and mar are available for re Frequently they a of children on wal to explore the out





and chalkboards y of materials r. Story starters, es and games are ple materials that sit this area.

aints, brushes, It markers, and a for the child's s. There are plastt in case a little

rovides constant stories and for d reading ne favorite activiwrite or dictate gs, adding these pages to the THING TO MAKE book which was kept in the art center.

The carpentry center contains cardboard boxes, a workbench, and tools. Boys from older classes are particularly helpful in the construction activities in this center. Reluctant readers have a real purpose for reading as they follow the construction directions.

The science center containing many of the objects from the real world is carefully designed to encourage observation and probing. Magnifying glasses, animals, an aquarium, and plants are just a few of the items provided. Materials to make folders and books are available. Children may write or illustrate their discoveries and observations. Easy access to science magazines and books which contain needed information makes this a popular spot. Classifying shells and other objects calls for research, labeling, and mounting.

The dramatization center (playhouse) has unlimited possibilities. Often it is designed to follow a particular unit of interest. The puppets, dress-up clothes, dishes, stove, and a full length mirror are among the objects. This center can be changed to represent a house, a kitchen, a school, a store, or any number of interesting settings. Frequently, the teacher records the dialogue that occurs in this center, writes it on dialogue balloons as in the comic strips, and uses it for reading purposes. Can you think of a better way to help the child realize that print is just speech written down?

The blocks and games center also has endless possibilities, it contains blocks, puzzles, and many of the commercial and teachermade games of language and logic. Here the children learn to share and solve problems as they work with other children. The value of this center also depends upon the teacher's careful diagnosis of a child's needs and upon careful planning with the child so that he is able to select materials that are designed to help him in skill development.

The math center is full of manipulatory materials for teaching a variety of mathematical concepts. Mathematical concepts are not limited to the math center, however. Liquid measurement concepts are often taught in the kitchen center as the children read and follow a recipe. Linear measurement is learned as the children measure and build in the carpentry center.

Time and seasonal concepts are developed in their natural place in the natural setting, the science center. Concepts about money can be learned as the children add up their grocery bills or as they play the role of clerk in the store.

Teachers and aides find time to listen to children, take dictation, help them write, construct and manipulate machines, and are available for reading aloud to children. Frequently they accompany small groups of children on walks outside the classroom to explore the outside.

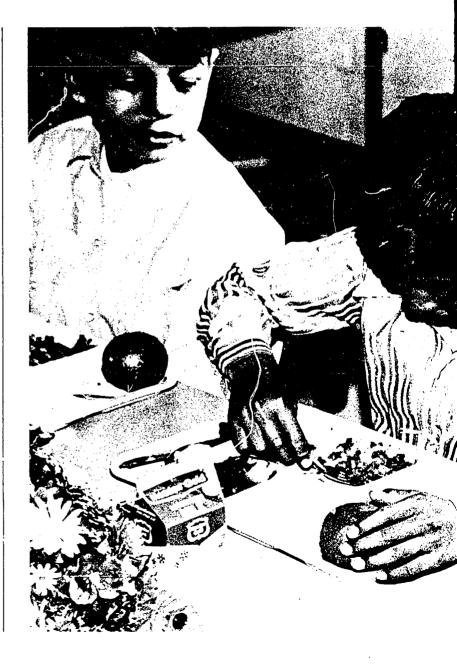


A visitor to the classroom might notice older children moving around the classroom helping small groups or individual children in solving their problems. He may also hear some of the teachers say that they are amazed at how well John helps because he has always seemed to have so much difficulty in school himself. Perhaps this type of role is even more beneficial to the tutor than his regular class work.

Primarily the reading and writing activities center around actual experiences. Basic to classroom procedure is the belief that language development occurs best when the child is actively involved in the functional use of language. Moffett said, "As the child becomes more and more involved in both the giving and taking of language he gathers momentum and accelerates his progress in all the areas of the language arts—listening, speaking, writing, and reading."

As one moves about in this languageexperience centered classroom, he notices that the role of the modern teacher has changed, and will probably agree with Eberle who said that the teacher is no longer a "sage of the stage" but rather a "guide on the side."

A recent nutrition study conducted at Indian boarding schools showed the students to be among the best-fed children in the country.





might notice and the classsor individual oblems. He may hers say that they hin helps because ave so much f. Perhaps this peneficial to the swork.

writing activities riences. Basic to belief that urs best when the the functional id, "As the child wolved in both guage he gathers s his progress in e arts —

s languagecom, he notices n teacher has agree with eacher is no '' but rather a

study conducted at schools showed the among the best-fed ren in the country.





Adult Education

The Adult Education program provides services to recognized tribal groups living on or near reservations. The services provided cover a wide range of activities based on local educational needs not covered by other Bureau programs.

The major activity is providing high school equivalency (GED) instruction to Indian adults who have not completed high school. Another major area of instruction is Adult Basic Education for those who have less than a fifth grade education. Those receiving instruction improve their performances at home or on the job, go on to vocational training or college. Vocational technical training for Indian adults is made available through the Bureau's employment assistance program.

In any of the field programs, the student voices his interest and the educators try to help the student pursue his goal. Field programs are operated in several ways — many are funded by the Bureau of Indian Affairs and administered by the BIA personnel. In other instances, the Bureau contracts with the tribes to administer the programs.

Over the past several years about 10,000 adult Indians have been enrolled annually in some form of organized learning situation. Of these, about 2,500 are enrolled in high school equivalency and about 2,500 in Adult Basic Education with about 900 yearly achieving their GED's.

During 1971, in an attempt to develop new and innovative approaches to the adult learning process, the adult learning center was conceived, and implemented in five pilot projects. This learning center concept does away with the traditional classroom instruction and replaces it with a multimedia approach with programmed materials. The learning centers, open on a daily basis, provide an individualized program. It allows the learner to proceed on his own level of achievement at his own speed at a time convenient to him.

Initial responses by the students enrolled in these programs endorse the learning center concept enthusiastically. Additional centers will be established in other locations as funds become available.





In any of the field programs, the student voices his interest and the educators try to help the student pursue his goal. Field programs are operated in several ways — many are funded by the Bureau of Indian Affairs and administered by the BIA personnel. In other instances, the Bureau contracts with the tribes to administer the programs.

Over the past several years about 10,000 adult Indians have been enrolled annually in some form of organized learning situation. Of these, about 2,500 are enrolled in high school equivalency and about 2,500 in Adult Basic Education with about 900 yearly achieving their GED's.

During 1971, in an attempt to develop new and innovative approaches to the adult learning process, the adult learning center was conceived, and implemented in five pilot projects. This learning center concept does away with the traditional classroom instruction and replaces it with a multimedia approach with programmed materials. The learning centers, open on a daily basis, provide an individualized program. It allows the learner to proceed on his own level of achievement at his own speed at a time convenient to him.

Initial responses by the students enrolled in these programs endorse the learning center concept enthusiastically. Additional centers will be established in other locations as funds become available.

rogram provides
ed tribal groups
ons. The services

iding high school ction to Indian bleted high a of instruction is those who have cation. Those ove their perthe job, go on to ege. Vocationalan adults is made cau's employment

ge of activities

needs not covered





44/45



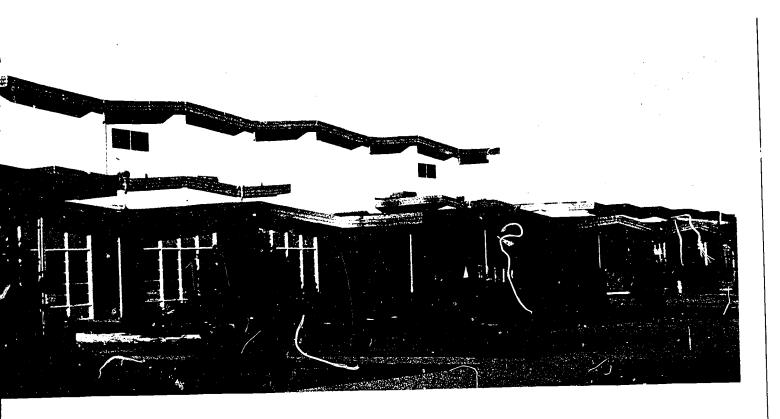
More than 430 public school districts with substantial Indian enrollments receive Johnson-O'Malley funds from the Bureau. The Gallup, New Mexico, Public High School shown here is one of the schools receiving assistance.

Public School Assistance

Indian enro of tax-szempt, I the district are e assistance throug Affairs under the commonly called Act.

Some public sch reservations hav consequently ha





Public School Assistance

Indian enrollments and large sections of tax-exempt, Indian-owned land within the district are eligible for special financial assistance through the Bureau of Indian Affairs under the Act of April 16, 1934, commonly called the Johnson-O'Malley Act.

Some public school districts on Indian reservations have a very small tax hase and consequently have insufficient funds to



operate effective school programs even with State aid and general Federal aid to education programs. In these districts the Bureau can provide funds to assure the operation of the school.

Ordinarily, however, the Johnson-O'Malley funds are used for supplemental education programs that identify with Indian children. For example, they might be used for the employment of home-school coordinators and guidance couselors for the Indian children, for cultural enrichment programs, curriculum development, special library services or the employment of Indian teacher aides in the primary grades.

All schools receiving Johnson-O'Malley assistance are required to have an Indian education committee which is involved in planning, developing, and monitoring the programs for which such funds are used. These committees are made up exclusively of parents of Indian children in the schools. Thus, the Indian parents can determine the needs of their children in public schools and develop programs that are responsive to those needs.

In the 1971-72 school year, the enrollment of Indian students in public schools receiving Johnson-O'Malley assistance was 86,780. Approximately 800 individuals from the local communities, most of them Indian, were working in public schools under this program as teacher aides, home visitors, and counselors. More than 1,700

professionals and paraprofessionals working with Indian children in public schools also were provided inservice and summer training to help them be more effective in their work with Indian children. Schools in 21 States received Johnson-O'Malley assistance.

In Alaska, where it is not feasible to have high schools in many of the small, isolated villages, Johnson-O'Malley funds are also used to pay the living expenses in dormitories and urban boarding homes for 1,666 students attending public high schools in the larger communities.

Johnson-O'Malley funds are made available to schools either through contracts with State Departments of education or tribal groups functioning as program administrators. State plans, developed cooperatively with the Bureau of Indian Affairs, take into consideration the ratio of Indian children involved, the extent of local tax efforts, all other sources of income, including other Federal program aides, and the special needs of Indian children.

The fiscal year 1973 budget for public school assistance is approximately \$25 million.





programs even al Federal aid to these districts the is to assure the

I Johnson-O'Malley lemental education with Indian chilmight be used for ne-school coordinalors for the Indian richment programs, t, special library lent of Indian hary grades.

nnson-O'Malley
o have an Indian
hich is involved in
nd monitoring the
n funds are used.
hade up exclusively
ldren in the schools.
Is can determine the
in public schools
hat are responsive

year, the enrollment ublic schools receivassistance was y 800 individuals nities, most of them n public schools eacher aides, home . More than 1,700 professionals and paraprofessionals working with Indian children in public schools also were provided inservice and summer training to help them be more effective in their work with Indian children. Schools in 21 States received Johnson-O'Malley assistance.

In Alaska, where it is not feasible to have high schools in many of the small, isolated villages, Johnson-O'Malley funds are also used to pay the living expenses in dormitories and urban boarding homes for 1,666 students attending public high schools in the larger communities.

Johnson-O'Malley funds are made available to schools either through contracts with State Departments of education or tribal groups functioning as program administrators. State plans, developed cooperatively with the Bureau of Indian Affairs, take into consideration the ratio of Indian children involved, the extent of local tax efforts, all other sources of income, including other Federal program aides, and the special needs of Indian children.

The fiscal year 1973 budget for public school assistance is approximately \$25 million.





Model School

The Sherman Indian High School at Riverside, California, is one of 32 schools in the United States chosen to participate in the Model Schools Project sponsored by the National Association of Secondary School Principals.

In the 1972-73 school year only 75 freshman students, about half the class, are participating in this special program, which will be adopted for all the students in the school in 1973-74.

The 75 freshmen work in the mornings under minimal direction in an open classroom situation, studying General Science, World History and English. In the afternoons they attend regular classes with the other students.

Teachers and para-professionals work with these students on an individual and small-group basis, with students encouraged to accept responsibility and initiate their own projects. Frederick C. Wilson, coordinator of the program, said: "We believe that learning should be on an individual basis with the student progressing at his own rate of speed."

Two students expressed typical reactions to the program.

Idella Lewis, 15, a Pima from Sacaton, Arizona, said: "I like it because the projects are not too simple and not too hard — and they teach me more than I already know. I learn something new every day when I really get with the class."

Verlan Fred, 15, a Hopi from Keams Canyon, Arizona, said: "I feel more free and I can get more help. I feel that everybody is helpful. I think the class is neat."

One of the major concerns of Superintendent Noel D. Scott and his staff is to be responsive to the needs of the students in a humanized education program. Students and their parents are involved in the

school's decision m including developm curriculum.

In the 1970-71 schol funded program, visited Sherman's parade recommenda assistance and program regularly asked tion of needs and t

Individual self-resp threads that tie it a Oliver Green, Acad simply: "We are us approach."

Sherman is taking a financial resources under the Element Education Act, to program. Title I fureading and mather physical education VI funds are used to class.

The remedial readicalled one of the ethe country by the Columbia University who were in the refull year made a measured by the Columbia Test. Tenth, elever students showed gitwo years.



The 75 freshmen work in the mornings under minimal direction in an open classroom situation, studying General Science, World History and English. In the afternoons they attend regular classes with the other students.

Teachers and para-professionals work with these students on an individual and small-group basis, with students encouraged to accept responsibility and initiate their own projects. Frederick C. Wilson, coordinator of the program, said: "We believe that learning should be on an individual basis with the student progressing at his own rate of speed."

Two students expressed typical reactions to the program.

Idella Lewis, 15, a Pima from Sacaton, Arizona, said: "I like it because the projects are not too simple and not too hard — and they teach me more than I already know. I learn something new every day when I really get with the class."

Verlan Fred, 15, a Hopi from Keams Canyon, Arizona, said: "I feel more free and I can get more help. I feel that everybody is helpful.! think the class is neat."

One of the major concerns of Superintendent Noel D. Scott and his staff is to be responsive to the needs of the students in a humanized education program. Students and their parents are involved in the

school's decision making processes, including development and revision of the curriculum.

In the 1970-71 school year, through a Title I funded program, 278 families of students visited Sherman's palm-dotted campus and made recommendations for student assistance and program revision. Students are regularly asked to help in the identification of needs and the search for solutions.

Individual self-respect and dignity are the threads that tie it all together at Sherman. Oliver Green, Academic Principal, says simply: "We are using a humane approach."

Sherman is taking advantage of available financial resources, including Title funds under the Elementary and Secondary Education Act, to improve the total school program. Title I funds support remedial reading and mathematics laboratories and a physical education program for girls. Title VI funds are used for a special education class.

The remedial reading program has been called one of the exemplary programs in the country by the Teachers College of Columbia University. Ninth grade students who were in the reading laboratory for a full year made a mean gain of 2.8 years, as measured by the California Achievement Test. Tenth, eleventh and twelfth grade students showed gains of one-and-a-half to two years.

n High School at hia, is one of 32 tates chosen to parchools Project spon-Association of cipals.

year only 75
put half the class, are
ecial program, which
the students in the



Sherman has the only math lab of its kind in the United States developed by Compucorp of Los Angeles in conjunction with the Sherman staff and the Phoenix Area Office of BIA. The individualized program utilizes self-contained Compucorp 022 and 025 computers.

Like other Bureau secondary schools, Sherman has a combination academicvocational program, and an arts and crafts program. Tribal craftsmen are brought to the school from reservations to teach such skills as pottery making, beadwork and basketmaking.

Underlying all programs at the school is the idea that each student is to be treated with dignity and respect and given, to the extent possible, the pride in heritage and culture which will help him succeed in his life.





th lab of its kind loped by les in conjunction and the Phoenix individualized ained Compucorp

lary schools,
on academican arts and crafts
n are brought to
ons to teach such
beadwork and

nt the school is the to be treated with iven, to the extent itage and culture eed in h. s life.







Specia Educa

ost school "average" cate that many I with physical and cannot be propenary classroom sundiagnosed healems fall behind characterized as hand, briggister stoiently challenge come bored, reset these students runfortunately, mare getting it, do





Special Education

ost school programs are aimed at the "average" student, but studies indicate that many Indian students enter school with physical and emotional handicaps that cannot be properly dealt with in an ordinary classroom situation. Children with undiagnosed hearing, sight and other problems fall behind in their work and may be characterized as slow learners. On the other hand, brighter students who are not sufficiently challenged by the curriculum become bored, restless and often drop out. These students need special attention, but, unfortunately, not nearly enough of them are getting it, due to a lack of funds.



The Pine Ridge Agency in South Dakota (Aberdeen Area) is a notable example of efforts toward meeting the needs of exceptional children. It is the first agency in the Bureau to have a full-time special education coordinator at the agency level, with a special education teacher or specialist at each of the agency's eight schools. There is also a special education instructional materials center located at the Porcupine School and serving the entire agency.

During the 1972-73 school year, 265 of the 2,800 Pine Ridge students were identified and received special services from the agency coordinator and the special education personnel at the schools. The agency receives consultant assistance from De. Walter Higbee, professor of special education at Black Hills State College. The Black Hills assistance was funded through a Title III grant.

The agency coordinator's primary job is to work with the teachers who are instructing the students with special educational needs. This involves a great deal of traveling from school to school as a trip to the Wanblee School, near the South Dakota Badlands, is a 94-mile drive from Pine Ridge.

The coordinator also distributes learning materials. These include language development kits, programmed reading materials, math step-by-step kits, and other materials.

The work of the agency coordinator, John Osborne, has been recognized by the Sioux

people. In a recent ceremony, Osborne was given the name, White Horse, or Sunk Ska Wa Kon Ski.

Edgar Red Cloud, grandson of the famous Sioux leader, Chief Red Cloud, said of Osborne, "This honor is given to John Osborne because of his great love and respect for Indian people and for his dedicated work with Indian children."

A survey of children enrolled in BIA schools in 1972 revealed that a total of 19,540 students were in need of special education. But only 3,715 were receiving it.





outh Dakota e example of needs of except agency in the pecial education evel, with a specialist at chools. There is ructional materrcupine School

year, 265 of the were identified from the special educals. The agency ce from Dr. special educallege. The Black through a Title

rimary job is to are instructing lucational needs. traveling from the Wanblee tota Badlands, is lidge.

butes learning nguage developding materials, other materials.

ordinator, John ed by the Sioux

people. In a recent ceremony, Osborne was given the name, White Horse, or Sunk Ska Wa Kon Ski.

Edgar Reo Cloud, grandson of the famous Sioux leader, Chief Red Cloud, said of Osborne, "This honor is given to John Osborne because of his great love and respect for Indian people and for his dedicated work with Indian children."

A survey of children enrolled in BIA schools in 1972 revealed that a total of 19,540 students were in need of special education. But only 3,715 were receiving it.





Science Program



Frank Dukepoo, a member of the Hopi Tribe, teaches science at the Phoenix Indian High School. He has his Ph.D. in Zoology from Arizona State University.

saguaro cacti of southern Arizona — among the Pimas and Papagos and Apaches — a new method of teaching science to elementary and junior high school students is producing results. The program is SCIS (Science Curriculum Improvement Study), devised by science professors at the University of California, Berkeley, with a grant from the National Science Foundation.

The program was set up principally for inner-city children, who lacked the background to grasp science through the traditional textbook method, but is proving fully as applicable for experience-shy Indian children in the Phoenix Area of the Bureau of Indian Affairs.

In Life Science, the students work with plants and seeds and small animals and fish, and with the flora of the area — the prickly pear, barrel cactus, the palo verde tree, and the giant saguaro, a magnificent cactus unique to this part of the country. In Physical Science, they might learn how to hook up an electrical circuit or study different kinds of soils to determine their moisture content. In essence, the children learn by doing, in contrast to the traditional text-book technique, and the classroom becomes a veritable laboratory with aquariums, small garden plots and planter cups for each student.

Converting the classroom into a laboratory presents some problems, however, such as

at the Casa Blanca I River Reservation w Nancy Wobser, said the classroom were The program consu Staley of Arizona S gested that she intreshe did. The guppie solving the problem

SCIS was introduced in 1969 at the Salt the Pima Reservatid grade teacher, Mrs. marvelous program a chance to experin fic concepts and to covery. It has caugh Phoenix Indian Hig being used with jun students often com hours to dabble wit trips are an importa program, and stude into the desert coul and animals.

Kits containing the the students work, Physical Science, w can Science and En Mass., and are arrar level.

Cleo Crawford, and the Phoenix Area d was being set up at



own among the tall palms and stately saguaro cacti of southern Arizona — among the Pimas and Papagos and Apaches — a new method of teaching science to elementary and junior high school students is producing results. The program is SCIS (Science Curriculum Improvement Study), devised by science professors at the University of California, Berkeley, with a grant from the National Science Foundation.

The program was set up principally for inner-city children, who lacked the background to grasp science through the traditional textbook method, but is proving fully as applicable for experience-shy Indian children in the Phoenix Area of the Bureau of Indian Affairs.

In Life Science, the students work with plants and seeds and small animals and fish, and with the flora of the area — the prickly pear, barrel cactus, the palo verde tree, and the giant saguaro, a magnificent cactus unique to this part of the country. In Physical Science, they might learn how to hook up an electrical circuit or study different kinds of soils to determine their moisture content. In essence, the children learn by doing, in contrast to the traditional text-book technique, and the classroom becomes a veritable laboratory with aquariums, small garden plots and planter cups for each student.

Converting the classroom into a laboratory presents some problems, however, such as

at the Casa Blanca Day School on the Gila River Reservation where the teacher, Mrs. Nancy Wobser, said the small aquariums in the classroom were breeding mosquitos. The program consultant, Dr. Frederick Staley of Arizona State University, suggested that she introduce guppies, which she did. The guppies ate the mosquito eggs, solving the problem.

SCIS was introduced in the Phoenix Area in 1969 at the Salt River Day School on the Pima Reservation. A veteran fourthgrade teacher, Mrs. Anna Martin, called it a marvelous program because it gives children a chance to experiment, to develop scientific concepts and to have the fun of discovery. It has caught on so well at the Phoenix Indian High School, where it is being used with junior high students, that students often come to the classroom afterhours to dabble with their projects. Field trips are an important adjunct of the program, and students are often taken out into the desert countryside to study plants and animals.

Kits containing the components with which the students work, both in Life Science and Physical Science, were developed by American Science and Engineering, Boston, Mass., and are arranged according to grade level.

Cleo Crawford, an education specialist in the Phoenix Area office, said a depository was being set up at Phoenix Indian High



of the Hopi Tribe, iix Indian High School. from Arizonu State



School to replenish depleted kits. The teacher and student manuals, which are also a part of the program, were printed by Rand McNally of Chicago.

David C. Hill, science and math supervisor at Phoenix Indian High School, believes there is no complete between the traditional methods of teaching science and SCIS. The latter is particularly appropriate, he pointed out, because Indian students have virtually no experience with the things they are studying.

The Phoenix Indian School has about 600 students — mostly Apaches, Pimas, Papagos and Hopis — but only the 200 junior high students, seventh, eighth and ninth graders, are involved in the SCIS program — a hundred in Life Science and a hundred in Physical Science. At the end of a semester, they switch.

Said Hill: "The kids plant seeds, measure the growth of plants, use fertilizer, and have their own planter cups. They work with small animal life — isopods, crickets and different kinds of fish. They study the environment."

A typical experiment determines the temperature that isopods (little black bugs) like best. The isopods are placed in a long aluminum tray, one end of which is encased in ice, with a light bulb placed over the other end to provide heat. This is to determine whether the isopods prefer the tropics or the polar regions. It was found that they

prefer the moderate climes, such as that found around Phoenix.

SCIS has been in use in Phoenix Indian School only a short time. But pre-and-post Metropolitan Achievement Tests given 60 students who participate in SCIS during the previous school year showed that 20, or one-third of the class, made a year's progress in a semester, heartening evidence that the program is making inroads into the Indian students' science deficiency.





1

eted kits. The luals, which are in, were printed by lo.

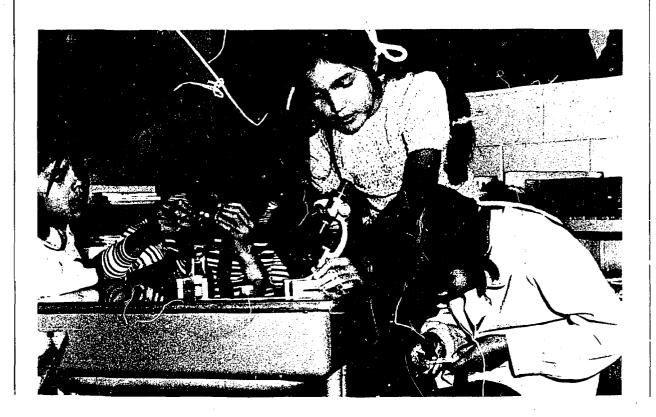
d math supervisor School, believes etween the tradiing science and fularly appropriate, Indian students ence with the things

ool has about 600 nes, Pimas, Papagos e 200 junior high and ninth graders, program — a and a hundred in end of a semester,

nt seeds, measure fertilizer, and ups. They work isopods, crickets sh. They study the

termines the temttle black bugs) like iced in a long alumhich is encased in ced over the other s is to determine er the tropics or found that they prefer the moderate climes, such as that found around Phoenix.

SCIS has been in use in Phoenix Indian School only a short time. But pre-and-post Metropolitan Achievement Tests given 60 students who participate in SCIS during the previous school year showed that 20, or one-third of the class, made a year's progress in a semester, heartening evidence that the program is making inroads into the Indian students' science deficiency.





Historical Background

Some knowledge of historical developments in Indian education programs is essential for understanding the present situation. National policies and attitudes have varied widely and have had tremendous impact, for good or ill, on the Indian peoples today.

In the period prior to 1870, education was designed to help Christianize and "civilize" the Indians. This meant, in essence, the replacement of Indian cultures while the habits and values of Western culture. Most of the education programs were carried out by religious missionary groups, with the

first Federal boarding school established on the Yakima Reservation in the State of Washington in 1860. The few Indians who completed this education usually left their tribal groups. The great majority did not accept in and education had little impact on the reservations.

In the period from 1870 to 1930 the Federal Government assumed greater responsibility for the education of Indians. The National policy was to attempt to shape the Indian into the image of the white farmer of rural America and to break up the rescrvations into individual farms. The curriculum stressed farming and homemaking, English, and the three R's. Speaking the native Indian language was commonly forbidden.

This effort did not have much success. Very few Indians became farmers in the American tradition. The average educational level on some reservations rose to only one or two grades, and, again, most of the small percentage who completed the available educational program left the reservations.

The granting of citizenship to all Indians of the United States in 1924 would not have any major educational impact until the next decade of the 30's.

In the 1930-1960 period the Federal Government and State public schools moved into a position of sharing responsibility for the education of Indians. Tech-





ıl ınd

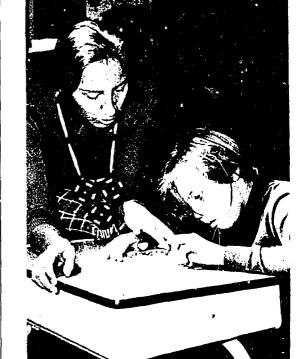
first Federal boarding school established on the Yakima Reservation in the State of Washington in 1860. The few Indians who completed this education usually left their tribal groups. The great majority did not accept it and education had little impact on the reservations.

In the period from 1870 to 1930 the Federal Government assumed greater responsibility for the education of Indians. The National policy was to attempt to shape the Indian into the image of the white farmer of rural America and to break up the reservations into individual farms. The curriculum stressed farming and homemaking, English, and the three R's. Speaking the native Indian language was commonly forbidden.

This effort did not have much success. Very few Indians became farmers in the American tradition. The average educational level on some reservations rose to only one or two grades, and, again, most of the small percentage who completed the available educational program left the reservations.

The granting of citizenship to all Indians of the United States in 1924 would not have any major educational impact until the next decade of the 20's.

In the 1930-1960 period the Federal Government and State public schools moved into a position of sharing responsibility for the education of Indians. Tech-



historical developducation programs anding the present icies and attitudes have had tremenor ill, on the Indian

1870, education was tianize and "civilize" it, in essence, the cultures with the estern culture. Most ams were carried out groups, with the





nically, the public schools had the same responsibility to provide educational opportunities for the Indian citizens as it had for non-Indians. Practically, the assumption of this responsibility was slow and gradual. With the passage of the Johnson-O'Malley Act in 1934 a carrot, in the form of inderal funding, was dangled in front of the public schools to induce them to accept more Indian students into their systems.

A massive study of Indian education included in the Meriam Survey, completed in 1928, began to have an impact. The effort to make the Indian a white farmer was abandoned. The improvement of basic education and the restoration of pride in Indian culture was

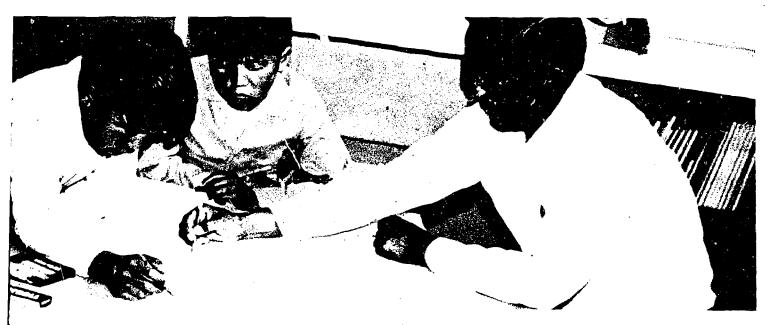
stressed. Preparing Indians for life on or off the reservation was the goal. There was a curriculum emphasis on community development, use of reservation resources and the development of industrial skills.

On the largest of the reservations, the Navajo, Western education prior to 1930 barely touched the tribe which had little contact with the non-Indian world. In the 30's fifty small day schools were built to accommodate about 3,500 students. At the end of World War II in 1946, only 6,000 of an estimated 24,000 Navajo children between the ages of six and 18 were in school. But the war brought about a tremendous change in attitude. Returning Navajo servicemen and former war workers

alike came banew understated education in children.

In the years t struction prokeep up with The scope of Navajo school 1971 – 55,05 and other school 1,300 attend That is almosyears.





s had the same educational ian citizens as it tically, the asibility was slow sage of the 1934 a carrot, in ling, was dangled ools to induce ian students into

n education included mpleted in 1928, The effort to make was abandoned. c education and the idian culture was

stressed. Preparing Indians for life on or off the reservation was the goal. There was a curriculum emphasis on community development, use of reservation resources and the development of industrial skills.

On the largest of the reservations, the Navajo, Western education prior to 1930 barely touched the tribe which had little contact with the non-Indian world. In the 30's fifty small day schools were built to accommodate about 3,500 students. At the end of World War II in 1946, only 6,000 of an estimated 24,000 Navajo children between the ages of six and 18 were in school. But the war brought about a tremendous change in attitude. Returning Navajo servicemen and former war workers

alike came back to the reservation with a new understanding of the value and role of education in the life training of their children.

In the years that followed, massive construction programs were required to try to keep up with the needs for school facilities. The scope of this effort is indicated by the Navajo school enrollment figures for 1971 – 55,081 students in Federal, public, and other schools, not including some 1,300 attending colleges and universities. That is almost a ten-fold increase in 25 years.

